

THE ATLANTIC MONTHLY

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THE SHARKS OF NARBOROUGH

BY WILLIAM BEEBE

I

I ANCHORED the glass-bottomed diving-boat as close to the cliffs of northern Narborough as I dared, in a cove where the water was so deep that the swells remained unbroken until shattered against the lava itself. The rocks at this point showed very clearly their division into successive lava-flows, some like frozen, black molasses-candy six feet thick, alternating with thinner strata in the shape of huge bricks. The topmost layer was the same old ploughed field of cinder crags and snags with which we were so familiar on Albemarle. This is probably the eruption of one hundred years ago of which Morell wrote so vividly.

This, my seventieth descent, took me into a submarine world as strange as and as unlike that of Tagus Cove — which we could still see in the distance from the ship — as that differed from Tower. If they were jungles and deserts, this was a wheat-field. Swallowing as I went, I climbed down and down, and stood at last on a gigantic rounded boulder, thirty feet below the surface.

This roundness itself spelled a distinct difference between this and other shores of the Galapagos. The surf had pounded and rolled the rocks on this

unprotected coast until they had become huge pebbles. This explained the absence of tide-pools along the shore — the water simply filtering away as soon as the tide-level went down.

The dominant note of the underwater scene in this marvelous island-eddy was the seaweed. Great fields of it extended to the limit of vision, with bare or sponge-covered boulders between. Sargassum, with small berries, grew on long, slender fronds, two or three feet in length, which gave completely to every surge, more so than any land growth to the wind. While I have dived where steady currents hold strong day and night, yet by the very force of circumstances my puny efforts are usually confined to the surge-affected shore. Like a tide which changes every twelve seconds instead of every twelve hours, the whole underworld swayed outward and then, with infinite grace, inward again. All the innumerable strands of greenish-olive bent and flattened away from me, and then, with the slow movement attained only rarely by such growths as weeping willows, rolled toward and wrapped around me, reaching out toward the steep ascent marking the beginning of that upper world which

seemed so little a part of my life at a moment like this.

As the grass shifted and vibrated, many weird little inhabitants were disclosed for a moment, and then scuttled back to shelter — wrasse never seen before or since, twisting worms, crabs, and snails, all identical in color with the weed. The numbers and size of the fish were remarkable, almost every species being represented by larger individuals than elsewhere, perhaps due to the unusual abundance of food on these current-bounded shores. My old friends, *Xesurus*, the yellow-tailed cows, were grazing in schools of two to three hundred, shadowing slowly about the corners of boulders.

I was halfway up a steep slope, and by twisting the boat around with me I succeeded in reaching the summit, where I could look down upon a sinister valley, narrow and dark and deep, with the opposite ridge covered with long, waving weed. As I stretched full-length upon a mat of the sargassum, a gang — they were too ugly and dangerous looking to be called a school — of giant groupers parted the fronds and drifted through toward me, all dark in tone with the olives and browns. They mounded along, their ugly jaws chewing eternally on the cud of life, when suddenly, without the slightest warning, there came a distinct glow, and next to the last grouper came one of the golden ones. In their evident opinion there was no difference. He impatiently nudged a neighbor and in turn was pushed aside by the fish following him. The most careful dissection shows absolutely no physical difference, and yet, instead of being clad in mottled olive-green of the dullest, darkest shade, he is solid gold from mouth to tail. The weed was appreciably illumined when he passed through it. One strange thing has been that, rare as the golden groupers are, both two years

ago and during the present trip it has been only these gorgeously colored individuals that have attacked the propeller of our little outboard motors. Whether the color of the glistening brass attracts this shining caste more than the other duller grouper persons I have no idea.

A few minutes later a shadowy school, a second lot, of even larger groupers swept past in the blue distance with another golden brother in their number. He is all the more wonderful because there are no intermediates — one either has regal golden blood, or is of mottled-brown polloi caste. Here is materialized the mental effect which creates in fairy tales the one most beautiful creature or prince or lady among a host of dull or ugly ones.

Once again a huge sea-lion gave me a start. As I stood watching a mist of grazing *Xesurus*, I felt a sudden water-pressure against my back and legs, and turned in time to see a monstrous black shape bank and veer away, having rushed in a lightning sweep within a foot of me. His eyes were no longer the dull, soft, deerlike, half-seeing organs with which he gazed at me on land, but bright and clear and keen; the long whiskers stood out white and bristling, the mouth partly opened as he turned, and the dog teeth gleamed wickedly. As my eye caught the form I leaped involuntarily toward the ladder, forgetting that I was in a land where mighty acrobatics could be achieved with a push. I landed on a boulder at a height of about four rungs up, and some eight feet beyond the ladder — a standing high jump which broke the world's record in the upper air by feet. The strangest thing was that whenever I did such a thing as this I accomplished it slowly. I took off with deliberation in spite of my strongest effort, I went through the water with conscious elapse of time, and I landed as in a slow-motion picture.

The instant I leaped I realized my mistake and watched the wonderful form as it swung up from me. It turned just below the surface and again shot down. I think a considerable percentage of these manoeuvres was pure side, executed for the benefit of a smaller, probably a lady, sea-lion who hung between earth and air a short distance away and watched. The big male — he was certainly over seven feet long — began his second rush at an acute angle, heading for the bottom some distance away. Turning like a meteor the moment his head touched the waving seaweed, he again cleared me by inches. I could not help flinching, not so much from a fear of being bitten, as from a disbelief that such a great body could possibly stop its impetus and avoid smashing into me. As he passed, I stretched out a hand and felt the smooth, hard body brush against my fingers. This was apparently a surprise to the animal, who in alarm inserted an extra curve into his simple parabola, and in the effort gasped out a mouthful of bubbles. This time he shot to the surface and half out, followed by his admirer, while the string of bubbles ascended slowly — coalescing, as it went, into larger and fewer spheres, like the puff of smoke from an aeroplane engine, or the blossoming of white shrapnel against a blue sky. In each bubble I could see a distorted reflection of myself, my helmet, and all my surroundings.

A glance around showed that every fish had vanished, and not until two or three minutes had passed did they begin slowly to come into view. The sea lions are the masters of these waters, and I was surprised to see even a great turtle slide hastily out of the way when one came too near. Sharks always disappeared with the fish.

Even if the fish had not returned I could have watched the movement of

the seaweed for hours, it was so unlike the movement of wheat or grass. The whole mass seemed alive, — a field of Medusa growth, — each stem writhing and curling and twisting of its own volition, in its own particular way, and yet the whole ebbing and flowing as one frond in obedience to the rhythmic breeze. It was the old story over again of the single corpuscle tumbling and rolling individually, while yet helpless in the general current of the blood; and of the colonial organism, each individual ant doing his own work and bound irrevocably to the will of the whole; and — who knows? — it is perhaps no whit different from the apparent free-will personalities of our separate selves, compared with the destiny of the human race.

I sat me down on a couch of golden, blowing weed, with beautiful green-armed starfish sprawled here and there, and, leaning back, watched the bubbles of my life's breath tumble out from beneath my arms and shoulders. From invisibility, from the colorless, formless stream of gas flowing down the length of black hose, they became definite spheres, painted and splashed with all the colors in sight. Once, when I was making my first flight in a plane, I had for a short space of time the soul-devastating sensation of being suspended motionless in the ether while the earth dropped away from me. That has never been repeated; but here on the bottom of the sea, looking upward, I can as often as I wish conjure up the belief that I am actually looking at a constellation, a galaxy of worlds and stars, rolling majestically through the invisible ether. The background is as mysteriously colorless and formless as space itself must be, and as I peer out through my little rectangular windows I seem to be actually living an experience which only the genius of a Verne or a Wells can imagine into words. It

suddenly flashes over me that in giving over my moon and stellar longings for the depths of the sea I have in a manner achieved both.

I have even the sensations of a god, for in each of the spheres I have created I see very distinctly my own image. But I also see many more interesting things, and my moonings in the present instance are brought to an abrupt end by a glint of gold which appears on each globule of air — a fiery pin-point which becomes an oval, and soon a great spot as if a sun were rising behind me. If I were looking at a real planet such a thing might be a tremendous volcanic eruption on the surface. Twisting slightly and peering obliquely through my little periscope, I saw what after all is the most joyous thing in life, an old friend in a new guise — another great golden grouper was just behind me, revealed to me by his reflected image on my ascending breath.

II

To my left the rope from the anchor-weight led up in a graceful curve to the distant, dark silhouette of the boat. Now and then a window opened in the ruffled ceiling and framed the anxious face of my faithful assistant peering down, on the lookout for approaching danger. The face vanished, the window slammed shut as the water glass was withdrawn — and I am again visually lost to the upper world.

Two small, black forms approach from the offshore side of my aquatic sky, looking from below like the keels of funny, diminutive tugboats, but driven by a pair of most efficient propellers. These were rather turbines of sorts, furling and unfurling in a curling, spiral manner, which offered the most and the least resistance respectively to the water. Long rudder tails, two slender, sharp beaks, and sinuous

snaky necks came into view, and a swirl sent both birds into my world — meaning complete submersion for them. There followed a chase which no man's eyes have ever seen before — a pair of flightless cormorants pursuing a scarlet sea-bass, viewed from below. The fish saw them coming and fled at full speed, not in a straight line, but in a series of zigzags, perhaps, like a chased hen, seeing the pursuers first out of one eye, on one side, then out of the other, apparently on that side. The cormorants separated, one diving deeply while the other followed its prey directly. Soon the confused fish dived at right angles, and before it had time to turn again was in the beak of the second bird. The moment he was captured, both birds relaxed every muscle, and with dangling wings and feet let themselves be drawn up to the surface. There, even from my depth, I watched a second race begin, and surmised the details of what I had seen enacted twice the day before from the boat — a cormorant coming up with a fish and instantly chased by another, both traveling at such high speed that, with wings spattering and feet going, their entire bodies were almost out of water. At the first opportunity there was a quick upward toss, reversing the fish, and a gulp, and down it went headfirst. On this occasion I saw only the frantic disturbance of the surface, rapid dodging, and then cessation of motion, after which the leading bird immersed and shook its beak in the water several times, and I knew that if I so chose I could write in my journal that *Nannopterum harisii* includes *Paranthias furcifer* as an article of diet.

The surface ripples had hardly ceased when a cloud drifted across my sky. And at this place may I digress parenthetically long enough to make a certain point clear. As I ramble on of the adventures and sights which came

to me in my underworld, there would seem to occur there almost a rhythmic succession of happenings, one after the other, as with circus performers who wait in the wings for their turn to come. This works a hopeless injustice to this water world. Please remember that the exigencies of my place in that world and the physical make-up of my helmet enabled me to see only the merest fraction of occurrences even in an acute-angled single direction. A horse with blinders is a reasonable simile; or, better still, a half-blind old man, crippled with rheumatism and palsy, dropped suddenly into the busiest of a city's streets and requested to narrate the happenings about him, and give to them some sort of explanation!

Now, again, the ripples of the surface above me had scarcely died away to the usual heaving, opaque, moon-stone appearance of my water sky, when a cloud came drifting past. If I had been looking behind me some time before, and had eyes which could penetrate the wall of blueness in the distance, this cloud might at first have seemed no bigger than a man's hand. Overhead, however, it was large enough to darken the whole bottom, and, except along the rim, formed a solid mass. At least twenty thousand slender little Galapagos snappers floated over and around me. They were only two to three inches in length, slender and sinuous, grayish-black above, silvery below, with seven or more narrow dark stripes running parallel down the head and body. This was the clear-cut vision I had as the host drifted slowly, almost without individual movement, toward and over me. Some danger, unknown to me, wrought a whirlwind in this living cloud, and instantly every fish vanished, the whole becoming a mass of blurred lines — a great gray something out of focus. As quickly, fear passed, and every fish again became clear-

etched in its place among its thousands of fellows. Slowly all passed from view, a few hundreds along the lower edge sifting through the uppermost fringe of weeds. It occurred to me then that their man-given name was a singularly appropriate one — *Xenocys*, strange swift! It should have been *Xenocys xenocys*; they were too delicate, too immaterial, for any noun.

My sea lion returned for a last look, but slewed off, and then a turtle, almost as long as myself, swam into my ken. He was much more satisfactory a constellation than those in the heavens, of most of which I have never been able to make head or tail. But he was also a turtle at its best. Until one has looked up and seen eight hundred pounds of sea turtle floating lightly as thistledown overhead, balanced so exactly between bottom and surface that the slightest half-inch of flipper motion is sufficient to turn the great mass partly over and send it ahead a yard — until then one has never really seen a turtle. Two years ago when I visited these islands, I watched the little penguins waddling about with their Charlie Chaplin gait; I saw the cormorants awkwardly climbing over land, even hauling themselves along by means of a crook in their necks; the sea lions unlovelily caterpillaring along the ground; and great hulks of turtles ploughing their way as much through as over the sand of the beaches. It was now my privilege to see these same creatures in their chosen element, graceful, glorified incarnations of their terrestrial activities. In all this I had no false illusions concerning my own relative functioning. While I have never heard any rumor as to my possessing any grace even at my best, yet on these same islands and beaches I can at least correlate my activity, and I can easily run down any of the creatures that I am discussing. Whereas here at the sea bottom I

sprawl awkwardly, clutching at waving weeds to keep from being washed away by the gentle swell, peering out of a metal case infinitely more ugly than the turtle's skull, and superior to them only in my hearty admiration of their perfect coördination in an exquisitely adapted environment.

My nice turtle friend still floated motionless when suddenly he was the means of my making a delightful discovery in Einstein relativity — making clear the fact that he was motionless and yet not motionless. I was resting lightly on a bed of weeds with a generous tuft of them in each hand. I was aware that with every surge there was a very decided movement of the whole mass, but as everything in sight was equally shifted my mind registered no definite motion. Of one thing only was I certain: that, however we plants and organisms at the bottom were blowing and vibrating back and forth, the turtle at least, isolated in mid-water, was as still as the distant rocks themselves. Becoming cramped, I decided to stand upright for a while, and gently lowered my feet until I felt them fit into convenient crevices of the concealed rocks beneath me. This gave me safe anchorage, and in a minute more all my surroundings, my whole world, went trailing off as far as it could; then, with equal unanimity, all faithfully returned. I glanced upward and was as astonished as if, when on land, I should suddenly see the moon or sun begin to bob back and forth in the sky, for my turtle was behaving like everything else and was being swayed back and forth, suspended in the invisible medium, exactly as we at the bottom.

To look back upon it, no more silly lack of reasoning could be imagined on my part; but when you leave the world for which God made you, and willfully enter other strange ones, it is reasonable to suppose that your senses and brain

have to become readjusted as well as your more physical being. For five minutes I derived infinite delight from alternately swaying with the weed and holding to the rock, and thereby at will giving to my turtle absolute stability or rhythmical swaying through space. He seemed quite unaffected by the theory, but appeared fascinated by the sight of this strange copper-headed, white-skinned, wormlike being, with an enormously long, curving tentacle from the tip of its nose, forever pouring forth a mass of white, bubbly gas — a being that idiotically kept standing up and sitting down. Never for an instant did the great chelonian take its eyes from me. If I could put down what it actually thought of me, no halting words of mine would be necessary in this essay.

And still the turtle hung in the sky when two penguins arrived. For a time they swam around in little intersecting circles, constantly plunging their heads beneath the water to stare at me. Finally curiosity overcame them, they could stand it no longer, and down they came, clad in mantles of silvery bubble-sheen. They encircled me once and started on another round, but then became fascinated by the black hose and, after an examination, half paddled, half drifted, to the surface and were gone.

Two mighty schools of *Xesurus* passed me, grazing slowly. When within six feet they left off their eternal feeding and formed up into more or less orderly ranks which flowed like some enormously long sea-serpent around the identical corners of rocks where had passed the leaders yards and yards in advance. Invariably the formation of an irregular line led very close to me, the closing-up of ranks evidently being connected with the presence of danger or at least something suspicious or strange. It was an amusing sensation to have these hundreds of fish file

past, all rolling their eyes at me as they went. I felt almost embarrassed at times, as perhaps 'the remains' must occasionally feel as the viewing crowds stream past. With these yellow-tailed cows were widely scattered single individuals of a species of fish which we never caught or identified. In shape and in the general grayish-blue color of body they bore a considerable resemblance to the *Xesurus*, their characteristic marks being two white spots above the eyes; but they were not grazers, nor even, I believe, herbivorous. I never saw them graze even when the school of their associates remained in one spot, doing nothing else for a half-hour but scrape the algae from the rocks. Once, too, I saw one of these white-spotted chaps pursue a small fish, and though he did not capture it, yet I could not mistake his intent — there was nothing of play or yet of sudden anger in the attempt, but a very evident desire for food. They were much more timorous than the yellow-tailed surgeon fish, and at any hint of danger would dart into the thick of the school. All this makes me think that they are very likely examples of real mimicry, gaining a good percentage of immunity by the resemblance to and close association with fish which by their great numbers and poisonous spines are well able to fight off ordinary dangers.

III

When I rolled over and looked about, there came to me a vision of the abundance of life in the sea. The cloud of little fishes had gone, even the ubiquitous yellow-tailed surgeons were out of sight for once, and yet from where I sat I could see not fewer than seven or eight hundred fish, not counting the wrasse and gobies that played around my fingers as thickly as grasshoppers in a hayfield. Out of the blue-green dis-

tance or up from frond-draped depths good-sized gray sharks appeared now and then. Two came slowly toward me, closer with the in-surge, and then floating farther off with the out-swing. They turned first one, then the other, yellow, catlike eye toward me, and after a good look veered off. Near them were playing round-headed pigfish; a few *Xesurus* swam still closer; and even small scarlet snappers, the prey of almost every hungry fish or aquatic bird, even these went by without any show of nervousness. The pair of sharks passed on, almost unnoticed, and all the mass of life of this wonder world seemed going smoothly and undisturbed. Far away in the dim distance one of the sharks appeared again, or it may have been another — when, looking around me, I saw every fish vanishing. While I have mentioned what must seem an identical occurrence before, yet this was as different as a great battle is from a street accident. Through copper and glass and air I sensed some peril very unlike the former reaction to the sea lion, and I rapidly climbed a half-dozen rungs, swallowing hard as I went to adjust to the new altitude. Clinging close to the ladder, I looked everywhere, but saw nothing but waving seaweed. The distant shark had vanished, together with all the hosts of fish, even the bullying, fearless groupers. I was the only living thing except the starfish and the tiny waving heads of the hydroids which grew in clusters among the thinner growths of weed, as violets appear amid high grass. Whether the distant shark was of some different, very dreaded kind, or whether some still more inimical thing had appeared, fearful even to the strange shark, I shall never know. Five minutes later, fear had again passed, and life, not death, was dominant.

I climbed to the surface at last, my teeth chattering from the prolonged

immersion. This water, although in no sense the Humboldt current, is much cooler than that at Cocos, and I become numb and chilled without knowing it. Excitement and concentrated interest keep me keyed up, and the constant need of balance requires that every muscle be taut; then, when I reach the surface and relax, the chill seems to enter my very bones. Fortunately there is always either rowing or pumping to do, and this soon warms me.

During my last dive I had noticed five or six new species of fish and, hoping to hook some of the smaller ones, I decided to get some bait. I had the boat backed near the shore, and at a propitious moment, on the crest of one of the lesser swells, I leaped off. The scarlet crabs here are remarkably tame, far more so than on any of the other islands — a fact for which I can in no way account. The casual visits of man may be, of course, ruled out, as having nothing to do with it, and yet here birds and fish, the crabs' most deadly enemies, are unusually abundant.

With two big scarlet crabs, I vaulted back on the crest of another convenient little swell, fortunately just avoiding the succeeding three, any one of which would have tossed our cockleshell high up on the jagged lava. I found to my disappointment that we had between us only one hook, and that a large one. However, I anchored again near the spot where I had last dived and threw over the hook. I immediately caught one of the round-headed pigfish. As I was pulling a second one in, a six-foot shark swung toward him, and this gave me a hint upon which I acted at once. I pulled in the fish quickly and studied the situation through the water glass. Two sharks were swimming slowly about the very rock where I had been sitting a few minutes before, probably the same individuals who had then been so

curious about me. A small group of the pigfish swam around, over, and below the sharks, as they had also done when I was submerged, sometimes passing within a foot of the sharks' mouths without the slightest show of emotion, of fear or otherwise. An angel fish and two yellow-tailed cows passed; a golden grouper and two deep-green giants of the same species milled around beneath the boat, now and then cocking their eyes up at us.

I baited the hook with a toothsome bit of crab and lowered it. All the pigfish rushed it at once, and as it descended the sharks and groupers followed with mild interest, almost brushing against it, but wary of the line. Failing to elicit any more practical attention from the golden grouper, I allowed one of the pigfish to take the bait and hook. Then, watching very carefully, I checked his downward rush, and swung him upward. He struggled fiercely, and like an electric shock every shark and grouper turned toward him. Without being able to itemize any definite series of altered swimming actions, I knew that something radical had happened. The remainder of the school of pigfish, while they stayed in the neighborhood, yet gathered together in a group and milled slowly in a small circle. There was no question that, from being a quiet, slowly swimming, casually interested lot of fish, the three groups — pigfish, groupers, and sharks — had become surcharged with interest focused on the fish in trouble. I drew the hooked fish close to the boat, and could plainly see that the hook had passed only around the horny maxillary. There was not a drop of blood in the water, and the disability of the fish consisted only in its attachment to the line. Yet the very instant the struggle to free itself began, the groupers and sharks, from being at least in appearance friendly, or certainly

wholly disregarding the pigfish, became concertedly inimical, focused upon it with the most hostile feeling of an enemy and its prey.

For half an hour I played upon this reaction and learned more than I had ever seen or read of the attacking and feeding habits of groupers and sharks. When the struggling began, the sharks all turned toward the hooked fish. Not only the one nearest, who must easily have seen it for himself, but two far off turned at the same instant, and within a few seconds two more from quite invisible distances and different directions. What I saw seemed to prove conclusively that sharks, like vultures, watch one another and know at once when prey has been sighted by one of their fellows. The numerous sharks thus call one another all unintentionally; as happened when one of our party caught a shark at Cocos, and in an incredibly short time there were seventeen close by. On the other hand, it must be admitted that sharks differ from vultures as widely as the poles in the matter of scent. Vultures probably all but lack this sense, while we know that fish have it well developed. But, even in the case of blood in the water, it seems to me that diffusion cannot be nearly rapid enough to account for the instantaneous reaction on sharks near and far. The phenomenon is as remarkable in general aspects as the apparent materialization from the air of a host of vultures where a few minutes before none were visible.

Even more than this problem did the method of feeding of sharks and groupers hold my attention. After making sure of the first phase of interest, I allowed a six-foot shark to approach the hooked pigfish. It came rather slowly, then with increased speed, and finally made an ineffectual snap at the fish. The third time it seized it by the tail and, with a strong sideways twist

of the whole body, tore the piece off. The second fish attacked was pulled off the hook, and two sharks then made a simultaneous rush at it. So awkward were they that one caught his jaw in the other's teeth and for a moment both swished about in a vortex of foam at the side of the boat.

I noted carefully about thirty distinct efforts or attacks on the hooked fish, and only three times was I able by manœuvring the fish to get the shark to turn even sideways — never once on its back, as the books so glibly relate. I sacrificed seven pigfish, and then tried to get the golden grouper, but it was too wary. A giant five-foot green grouper, larger than any we had taken thus far, was becoming more and more excited, however, and when I had tolled him close to the surface I let my fish lure drift loosely. One swift snap and the entire fish disappeared; then a single slight nod of the head, and the line parted cleanly. The general effect was of much greater force and power exerted in a short space of time than in the case of the sharks. When it comes to lasting power, however, the groupers fight for only a short time after being landed, while the sharks smash and thrash until they are actually cut to pieces.

After this exhibition I would, without hesitation, have dived in the helmet again in the very spot. I had had these sharks close to me a little while before; and, although my efforts under water seem to me no less awkward and helpless than those of a hooked pigfish, yet to these so-called man-eaters there is apparently all the difference in the world, and I am certain I should be absolutely safe from attack. The pigfish which entered into the experiment with no enthusiasm or volition were *Orthopristis forbesi*, the groupers were *Mycteroperca olfax*, and the sharks were *Carcharias galapagensis*.

AUGUSTUS BAGSTER, THOUGHT BROKER

BY SAMUEL McCHORD CROTHERS

I

IN my mail I found a circular marked 'Important,' which seemed to indicate that it was n't. I was about to consign it to the wastebasket when I saw that it was from an old and valued friend whom I had not met for several years. It was written in that lucidly dictatorial style affected by modern advertisers.

AUGUSTUS BAGSTER

THOUGHT INVESTMENT BROKER AND BANKER

Safety and Satisfaction. Why not?

Watch your Intellect grow.

A thought saved is a thought earned.

When you invest in stocks and bonds, you choose your banker carefully. What about your thoughts? Does anybody look after them? Do you know how to select sound and seasoned ideas? Do you know how to invest your accumulated experiences so as to get returns from them? How much wildcat stock have you just now in your mental safe-deposit? Do you *know* that you are intellectually solvent, or do you only hope so? Did you ever have a skilled accountant go over your intellectual securities and estimate their present market-value? How much do you mark off for depreciation every year? Have you any facilities for coöperative thinking, or do you hoard your thoughts? What about that big thought that came to you last summer? Is it now a part of your working capital, or is it lying idle? Whatever your goal is, gain it through investments in high-grade thoughts. Let us help you. Bring your investment troubles to us. Send for our booklet. Do it now.

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After reading the circular, I lost no time in going down to the financial district to call on Bagster. I found him on the fourteenth floor of a big office-building. He greeted me with his accustomed cordiality, and bade me disregard the notice on his desk that this was his busy day.

'What are you up to now?' I asked. 'Something new?'

'Not at all,' said Bagster. 'Same old job ministering to the unfelt wants of people who know that there's something the matter with their minds and want someone to tell them what it is. It's a common predicament in this all-too-complicated world.'

'From the sign on your door I gathered that you had taken up with some kind of New Thought.'

'Bless you, no. I have n't a thought that is less than two thousand years old. I never had any originality. I've a good deal of native applicability. I like to apply old thoughts to changing conditions — it freshens them up. When I find people who are muddled I like to help them if I can. That's all.'

'The people I am interested in are intelligent persons who have come to the "years that bring the philosophic mind." That is about twenty years after the date set in our educational system for the study of philosophy.'

'Touchstone asked Corin, "Hast any philosophy in thee, shepherd?" By that he meant to inquire whether Corin was interested merely in some

particular sheep, or whether he liked to talk about the shepherd's life in general.

'We curiously enough set apart for the study of philosophy the period in life when the mind has the fewest facilities for profitable philosophizing. We say to the husky youth, "Go to, now! Stock up with enough general ideas to last your lifetime. Meditate fruitfully on the One and the Many. See things steadily and see them whole. In the 'sessions of sweet silent thought' get acquainted with the Cosmos. Having absorbed large ideas and learned to see things in their true relation, then you may take a few years in the professional school to fit you for your specific job. Just now you must finish up with the fundamentals."

'But the youthful Gallio cares for none of these things. He is not interested in the Cosmos. He is interested in himself. He does not care to sit on the banks of the River of Time contemplating its mighty current. He wants to go in swimming.

'But the chances are that if all goes well with him, and he succeeds in his own business, he will in about fifteen or twenty years awake some fine morning and ask what it is all about. He will be in a mood for philosophizing. John Stuart Mill, speaking of his own education, says, "Anything that could be found out by thinking I was never told until I had exhausted every effort to find it out myself. My father always gave his explanations not before but after I had felt the full force of the difficulties." After about ten or fifteen years of independent struggle with circumstances, enough difficulties are encountered to make the explanations interesting. If even in a small way one has overcome a real difficulty, he is anxious to give others the benefit of his experience. He thinks that it forms the basis of profitable generalization.

'The people I have in mind have accumulated a certain amount of experience. They have learned to do what they set out to do, but they have a surplus of unexpended curiosity and energy. Having tended to their own business, they are ready for larger operations. They have come, after considerable effort, upon some thoughts that seem to have a wide application. They are sure these thoughts have intrinsic value, but they do not know what their exchangeable value may be.

'They are in the same state intellectually that they would be financially if there were no banks or exchanges by which the individual's savings could be combined with others and put to work profitably in large undertakings. They are even worse off, for they do not know of any circulating medium and carry on their intellectual trade by primitive barter — a mere swapping of ideas. Owing to the lack of coördination, there is a great deal of waste. Many mental factories are running full time, but at a loss. Their facilities for production are greater than their facilities for distribution.

'That being the case, it seemed to me that there was room for the despised middleman. These people need professional assistance. I am not a thinker. I am a thought investment banker and broker. I execute orders and give advice when it is asked for. In my advisory capacity I encourage intellectual thrift. I advise my clients that if their savings are wisely invested, and the accruing interest promptly reinvested, they can be assured of an intellectual competence. But they must beware of bucket shops.

'When a man in the course of his own business comes upon an idea which he is sure has wide applications, he does n't want to hoard it. He wants to get it into general circulation. He knows it has intrinsic value, but he does n't

know what its exchangeable value may be. "He that is first in his own cause seemeth just; but his neighbor cometh and searcheth him."

'Here, for example, is a man who has made his fortune in boots and shoes. He knows that business from A to Z. But one day he comes upon an idea that applies first of all to boots and shoes, and then to everything else. He feels like Jack when he began to climb his beanstalk. There seems to be no end to it. It's a principle, and he wants to apply it in a large way. He applies it to Church and State, the public schools and the board of aldermen. The thought expands and almost explodes. He wonders why the preachers and teachers and politicians have n't got on to it. It would revolutionize their methods. In fact, it would revolutionize society.

'Now, if in the first flush of his enthusiasm he were to present his ideas to his business associates, they would think he was a Bolshevik. But if he is fortunate to see my advertisement he will come to me and make a few inquiries. What is the present state of the thought market? Is it able without disturbance to absorb so large an offering? I suggest to him that he might be in a better technical position if part of his intellectual capital were in a more liquid form. In a revaluation of his holdings he must be prepared for some paper losses. There is likely to be a difference between the book value of his stock and the market value. In the case of unlisted securities there is often a considerable margin between the bidding and the asking price. All this seems reasonable to him and we sit down and do a little figuring.

'In estimating the exchangeable value of an idea, a great many considerations must be taken into account. The market price of a thought depends a good deal on who thinks it. An idea is

like a check — its value is greatly enhanced by the name of its endorser. Here on the front page of the daily newspaper is an idea endorsed by Mr. J. P. Morgan. Large headlines proclaim its value. "Never do anything which you do not approve of in order to accomplish something you do approve of." That is a perfectly sound proposition. But if the minister of the Methodist Church in Sauk Centre, Minnesota, had said that, as he probably has many times, it would not have been telegraphed over the country. When Mr. Morgan says it, it is news.

'There are useful persons who are not original thinkers but who are indispensable in the commerce of ideas. They take thoughts from one province where they are cheap and transport them to another where they are rare. I think that these common carriers should receive some profit over and above the bare transportation charges. A part of the service I render is in facilitating these exchanges, and in analyzing the cost involved in transportation.

'Yesterday a prosperous merchant came to me and, taking a newspaper clipping from his vest pocket, read excitedly: "The *Manchester Guardian*, commenting on the shipment of cotton goods to Central America, expresses the opinion that the larger purchases of coffee in Germany in recent months contributed to increase the sales of Lancashire products to Central America and Brazil."

"Here," he said, "is a commonplace in the business world. I wish you'd tell me how to get it over into the minds of the clergymen. It has great spiritual value and it would revolutionize their preaching if they could only be made to see it. My minister has been running a course of sermons on Religion and Modern Civilization. He treats them as if they were trade rivals and the only way

were cutthroat competition. Now we business men have got away beyond that. He thinks if he can run down Modern Civilization he can get its custom into the church. He began with a sermon on the Bankruptcy of Science, then he has gone on enumerating one thing after another that has failed — Greek Philosophy, Ethics, and all the rest. When he's got all the competitors out of the way, he's going to wind up with a sermon on Religion, the only hope of a ruined world. I'm afraid that he will get us so in the habit of looking for failures that we shall be discouraged about religion, when we come to it.

"Now I should like to spring that item from the *Manchester Guardian* on him, and see how he takes it. When we let up a little on the Germans, they buy more coffee, which allows the people of Brazil to buy more cotton goods from the Lancashire mills, and so it goes. Now does n't spiritual prosperity follow the same laws? If I had a chance to preach, I would n't run down Modern Civilization. I'd boost it. I'd show that Science and Art and Morality and Economics are departments of one Big Business. They help each other when they grow healthfully. I'd make a chart and make everyone in the congregation see the point. It does n't matter where the wave of prosperity starts. It spreads."

"Why don't you do it?" I said. "You have Laymen's Sunday in your church. Just the chance for you to preach. I can tell you of some mighty good texts."

II

"I am continually warning people against reckless speculation. I tell them not to believe everything they see in a prospectus. Go slow on any proposition that promises abnormal returns for a small investment. Don't let

anyone sell you the blue sky. Here is a letter from a man who says he is one of Abraham Lincoln's plain people: —

"I'm a native American and don't care who knows it. Since the war I have accumulated an amount of patriotism that I don't know what to do with. How shall I invest my surplus? What do you think of Hundred-Per-Cent Americanism? Is that too high a per cent for a plain citizen who is n't running for office? Or should I be content with a more moderate return? What about investing a portion of my patriotic enthusiasms in K. K. K., Inc.? I enclose a circular which I have just received. It looks good to me. I don't see where I could get a hundred per cent so easily. I notice that in order to get in on the ground floor I have to be a Nordic. Could you tell me how I can qualify? All I know about them is that the Nordics were Protestants from away back before the Christian era. But were they any particular denomination of Protestants? Or does every stockholder get a certificate of Nordicity when he pays his ten dollars?"

"I answered in a conservative way: "The securities you mention are highly speculative. You should look into the history of these offerings and avoid irresponsible dealers. The market for racial and religious antipathies is very fluctuating. At one moment it rises to enormous proportions, and then it goes flat. Avoid companies that exploit two kinds of antipathies at the same time. One is enough. This is a big country, and you can't corner the hate market. If you must invest, choose your antipathy cautiously, then put it away in a safe place and think no more about it. Do not expect a ready market for it. Most persons have antipathies of their own and don't care to have others dumped upon them."

'Here is a letter from an excellent and

public-spirited citizen which shows the kind of questions that come to me. While they require only a moderate amount of business sagacity, yet they are not without their difficulties. One correspondent writes:—

“My chief interest has been in enterprises dealing with the peace of the world. Complications in world politics have made it necessary to scrutinize my investments. I ask suggestions from your office. Almost any plan for keeping the peace looked good to me, and in the course of the last twenty years I have invested in pretty nearly everything that was offered. I have taken stock in Hague Tribunal, Benevolent Neutrality, Pan-Americanism, League of Nations (with or without reservations), Outlawry of War, Washington Conference, World Court, Youth Movement, Limitation of Armament, Society of Friends, Universal Religion (when, as, and if issued). I invested in the first issue of War to End War. These were short-time bonds to mature in 1919. When the date of maturity arrived, it was found that no provision was made for meeting these obligations, and an extension of time was asked.

“As I am loaded up with these securities, which I took in good faith, I am looking for relief. Might not a committee be formed to protect the interest of the investors? I think we ought to consolidate our holdings. Perhaps some of the older pacifist issues might be retired and new issues be presented that would reach a wider investing public. Competitive peace-planning seems as wasteful as competitive armament.

“Here is an editorial in a paper devoted to the cause of international peace. It bitterly attacks the League of Nations for not interfering in the recent crisis in Egypt, though it declares that if it had done so that would have been the end of the League. ‘In our judg-

ment it would have been better for the League to have smashed itself up in a vain attempt to settle the Egyptian question than to continue to exist amid wars and rumors of wars.’

“What do you think of this as a business proposition? Should the League smash itself up trying to do something that it knows it can’t do now, or should it try to keep on as a going concern even though it can’t pay dividends for several years? What would you advise me to do with my various holdings?”

‘I wrote my client in regard to the advantage of diversified investment. “I would suggest that this is not a time for panic. Do not dump any large block of peace securities on the market so as to depress it. The fact that a man like yourself can sympathize with so many ways of keeping the peace has a steadying effect. It is well to have even the weaker securities in strong hands. If the whole list can be kept active, it ensures a continuous market. You know Sir Philip Sidney used to advise his friends, ‘When you hear of a good war, go to it.’ That was a great encouragement to the sixteenth-century militarists. Why should n’t you say, ‘When you hear of a good peace, go to it.’”

“I agree that cutthroat competition between peace plans is uneconomic. We should remember that the best plan is not that which looks best on paper. It is the plan that can be put through. When at last it is put through it may turn out to be a combination of various plans, or it may be an old discarded plan with something added to make it work. Or perhaps what is needed is *somebody* who has force enough to work it.”

‘I suggested also that arrangements might be made for bringing Peace issues within the reach of the ordinary man. World peace seems rather a big proposition for a person of moderate

means. He does n't know how to swing anything so big. Now, if peace principles in smaller denomination were offered him, he might feel like investing his little all. A peace plan covering his own ward might seem attractive. If he found that he could carry on a neighborhood church or a town meeting peaceably, he might be induced to take stock in more ambitious enterprises. More attention should be given to the small investors.

III

'Perhaps there are no subjects in regard to which I have had more inquiries from well-meaning people whose minds are in a tangle than in regard to the various Temperance issues. They have so overlapped that it is hard for the ordinary person to find his way about. There was a time when Temperance was a comparatively simple proposition. Most people would agree in regard to Ten Nights in a Barroom. The first night was really enough to convince anyone that a barroom was a good place to keep away from.

'But as the Temperance movement has gone on, it has become involved in many complexities. Temperance people differ among themselves, and are not always able to discuss their differences temperately. There is often occasion for Father Taylor's ejaculatory prayer, "Lord, save us from bigotry and bad rum — Thou knowest which is worse."

'Here is a letter from an earnest Temperance advocate who feels the need of expert advice. She writes as follows:—

"About 1867 my mother invested in Victory Bonds of Ohio Crusaders. These bonds were to mature in 1880. Before the date of maturity mother was induced to exchange them for W. C. T. U. preferred. I inherited

these securities, together with a block of Moral Suasions from my grandmother's estate. They were, I was informed, no longer active on the exchange, but might have some value in the future. From time to time I have taken up the new issues of W. C. T. U. as they came out, particularly the Educationals. I invested in Coffee House, Local Option, Scientific Investigation, Three Square Meals a Day, Better Housing Conditions, Votes for Women, and State-wide Prohibition. I added to my holdings Y. M. C. A., Y. W. C. A., and Social Settlement. I looked upon this as a reasonably diversified investment. The bull movement in National Prohibition took me by surprise, but I promptly invested all my spare funds in Eighteenth Amendment and Volstead Act. I do not regret this, but I confess that I have been a little bewildered by later developments. I don't know just where I stand, for I am also a D. A. R. and have inherited, from my revolutionary sires, a large interest in Personal Liberties. Must any of these valued securities be sacrificed? I have been advised to sell my old securities for what they will fetch in the open market and invest everything in Law Enforcement. What do you think about it?"

'I wrote to her strongly advising her not to sacrifice anything. "Law Enforcement is all right, but it is what we call a business man's investment. It has to be watched carefully all the time. It is a strenuous job to look after it. There are lots of laws on the statute books, and the law enforcer must n't play favorites. I don't think you can afford to throw away that old-fashioned Moral Suasion your grandmother believed in. A little more of it would come in handy just now. After you have persuaded people to pass a law you have to keep on persuading them to obey it. That's the hardest part of

the job in this country. Do you remember the text, 'What the law could not do . . . '? There are some things the law can do, but there are a good many more things that the law cannot do. They have to be done in a different way. Don't get in wrong on that Personal Liberty issue. But insist that Personal Liberty has as its only security Personal Responsibility."

'Speaking of the various temperance reforms reminds me of the reformers of all kinds who come to my office, and with whom I have established a brisk business. It is what might be called a seasonal trade. In his busy season the reformer has no time to consider the relation of his cause to society as a whole. He is not a general practitioner like Hamlet, Prince of Denmark, who could boast that the world was out of joint and he was born to set it right. He is a specialist and confines himself to a particular joint. He holds on to that with grim tenacity, till it is set.

'But when his particular reform has been accomplished the reformer is likely to have a gone feeling. The cause for which he labored has triumphed, but it is not *his* triumph. Its opponents have forgotten that they ever opposed it. It is no longer a great moral issue; it has become an accomplished fact, and all the people who stand for accomplished facts accept it — and then go on as if nothing had happened.

'If the reformer is a sensitive and self-centred person, this is gall and wormwood to him. He is like the workmen in the parable who had borne the heat and burden of the day, and begrudged the eleventh-hour man his penny.

'But if the reformer is a sensible person he comes to my office to talk over the matter just as any successful business man might talk with his banker about changing his investments. He has had a quick turnover. He has

cleared a quite tidy sum in his last venture. He has an unexpended balance of pugnacity, and is in a rather speculative frame of mind. He would like to take a flyer in some new cause that conservative people are afraid of. What is there that's most unpopular just now? After talking with me he does n't lose much time in making the change. One can always find wrongs to be righted if he knows where to look for them. I keep a list in my office of reforms that are overdue. There are some choice bargains yet to be picked up.

IV

'A good many clergymen drop in from time to time seeking advice. They know that they are spiritually solvent, but they are not sure that they are intellectually so. One gentleman complained that he had some seasoned doctrinal bonds for which he had received no return in interest for a number of years. I looked up the securities and explained to him that these bonds had been called some time ago. The capital was safe, but the interest had stopped. The best thing for him to do would be to invest his spiritual capital in some securities that were not callable.

'A zealous minister came with his troubles. He had become, he said, socially minded, but he found it difficult to get his congregation to keep up with him. He had added one social activity after another in his church till the people complained that the addition of another good cause would be more than they could stand. What could he do about it? How could he keep his church up to the mark in social activities, without having it die on his hands?

'I took out a little pamphlet which I had received with the compliments of the U. S. Steel Corporation. It contained remarks by Judge Gary on the

subject of Pittsburgh Plus. "Let's get at the principle. You see, when the steel industry in this country was in its infancy, the cradle was in Pittsburgh. That's where the steel was actually produced. It was natural that the price in other parts of the country should be that established at Pittsburgh, plus the cost of transportation from that point. By and by steel began to be produced in Alabama and on the Great Lakes in large quantities. Why should transportation from Pittsburgh be included in the price of steel that had never come from Pittsburgh? Judge Gary explains how at last the U. S. Steel Corporation had to yield to the demand for a new standard for price-making. The price of steel is no longer determined by its distance from Pittsburgh, but there is a recognition of the point where it is actually produced.

"Now you are dealing with the same kind of question. The time was when all social-welfare activities were centred in the church. It was the Pittsburgh for altruism. But one society after another has been organized to meet special needs. These nonecclesiastical agencies have proved very effective. You are going on the principle of the church — your church — plus. If a person wishes to engage in work for the community, you expect him to join your church and then go to work. But what if he takes a short cut and goes to work without joining your church? When the individuals of your congregation join with their neighbors in good works, you want them to do all these things over again so as to make a good showing in your denominational yearbook. You miss the point of the parable of the Good Samaritan. He was n't a good Jew or a good Christian — he was only a good Samaritan.

"Why don't you cut out church plus? It will save a lot of bother. Your people then can do their good works in the

ways most natural and efficient without spending too much time in figuring out who will get the credit. It will save duplication. It will be better for the church in the long run. People can have leisure to be spiritually minded and socially minded at the same time."

"It is not the church people only who are troubled by the needless duplication of effort. A well-known philanthropist came to me for help. He said he had for some time been converted to the modern view of social responsibility. He did not consider himself as a benefactor when he contributed to various organizations for social welfare. It was a voluntary form of taxation.

"What he objects to is that, now that his principles are known, his assessment has been raised and he is the victim of triple and even quadruple taxation. He asked, "Does the fact that I have given as much as I can afford to one good cause carry with it the obligation to contribute as much to every other good cause? Would there not be a more general participation in altruistic enterprises if the principle of limited liability were recognized?"

"Not only were the demands for money increasing beyond his ability to pay, but also the demands for all sorts of social and semisocial services. During the war he had conducted a number of successful drives. Teams were organized to go through each neighborhood. Two gentlemen appearing where only one had been expected had an intimidating effect on the nongiver. It was an effective method. But of late the number of drives for divers good causes had so increased that the drivers were in danger of collision. "On my last drive," he said, "I carefully chose names of friends with whose generosity and affability I was familiar. When I called at their houses they were out. On my return to my home I found their cards, each friend stating that he would

call again to interest me in a philanthropic object to which he knew I would gladly contribute." My client suggested that if well-known philanthropists would subscribe to a gentlemen's agreement not to solicit from one another they might get more from the general public.

V

"I am organizing a department of domestic relations so that young people and their parents can exchange ideas as to what constitutes propriety. At present the transactions are conducted with the bickering that belongs to private bargaining. Paternalism and maternalism, however necessary in the family, are subject to the law of diminishing returns. Now if the time comes when this is manifest the parents and children could bring their ideas into the open market, and much misunderstanding could be done away.

"There is a great confusion in regard to values. Matters of taste or of fashion are given an inflated moral value. A policy of drastic deflation is indicated for such cases.

"Here is a letter from a young girl. "Dear Sir: I learn that you are dealing in moral exchanges. I wish you would straighten out mother's ideas for me. She is much upset over bobbed hair. Can you tell me how to adjust the matter with her so as to make everything pleasant? She is so solemn about it. Is bobbed hair morally wrong, or is it only unscriptural? If it is unscriptural, where can I find a commentary that explains it the other way? I love mother dearly, but she does n't understand me. I just have to do something that she does n't approve of. Perhaps if I knew what she used to do when she was my age, and she wanted to show that she was n't tied to grandmother's apron string, I might do that. What I want is the equivalent."

"By a curious coincidence I received a letter from her mother, dealing with the same subject. She said that there is a reckless rebelliousness on the part of the rising generation that bodes no good for the Republic. Young people are taking things into their own hands. They won't take advice unless you give them the reason for it, and that is n't always convenient. What is going to become of Civilization?

"I answered in a way to allay her fears about civilization and then to focus her attention upon the immediate problem. In regard to things in general, I recommended some statistical study. A table of statistics is a great stabilizer of the emotions. There is a strong family resemblance among averages. I enclosed a chart prepared by a well-known banking house showing by means of graphic curves the fluctuations of business for the last fifty years. Most people when they hear of good times and bad times have an exaggerated idea of the difference between them. But this chart shows that business sticks pretty close to the normal. What is lost in one way is made up in another. The lowest depression in the worst financial year did not fall fifteen per cent below normal, and in the years of greatest prosperity the rise was not more than that above it.

"I promised to send her a similar chart showing the fluctuation in the manners of the young during a similar period. Our chart has not been completed, but our statistician thinks it probable that the difference between high and low will not amount to more than ten points. There is a complication that has to be taken into account in calculating these averages. Owing to the increased time required for education, the period which is designated as youth has been greatly prolonged. The ladies who took themselves so seriously in the old-fashioned novels were about

fifteen years of age. By the time they were eighteen or nineteen they were matrons too much absorbed in bringing up their own children to criticize their parents.

"Your daughter is evidently irritated because you treat her as if she were younger than she feels, and she retaliates by treating you as if you were older than you are. The years make a barrier between you, and your minds, as the lawyers say, do not meet. She vaguely feels that the time has come when you should meet her more upon a level, and have a decent respect for her opinion. Perhaps she is right. If I were you I would look into the matter.

"If you wish to establish permanently profitable relations with your daughter, I would advise you to take her into full intellectual partnership, giving her an equal share in all the risks and the profits of your joint undertakings. This sense of responsibility will be good for her. Nor will the difference in value of the contributions you make to the common fund be so great as you may imagine. The book value of your accumulated opinions may be greater, but hers may have the greater marketability. A good deal of your capital is tied up. You have a good many fixed ideas that have value only for their associations. When you clean up all your mortgages you may find that your equity is not large. If you are to develop any new and profitable intellectual business it will be very advantageous to draw on the quick capital which your daughter can furnish.

"The difference in age need not trouble you. You are aware that in these days less importance is put on the dates in the family Bible. Estimates are now made on the basis of what is called mental age. Call at our office and let our experts determine

your mental age. Perhaps when you ascertain it you may look upon your daughter as a contemporary."

"While mothers are likely to be concerned about any deviation from the manners of their girlhood, most of the inquiries from the fathers indicate that they are desirous that their sons should have advantages greater than those which they have enjoyed. Especially is this the case with those who have made their own way in the world. But when it comes to considering what these advantages are there is a great deal of vagueness. Only yesterday a prominent business-man came to ask my advice as to the best college for his son. Knowing that I dealt in intellectual exchanges, he thought I might furnish him with the ratings of various institutions. He brought with him a number of catalogues and I found that he was very much impressed by the colleges that offered the most courses and had the longest list of noted professors.

"I am looking," he said, "for the college which offers the greatest advantages." "For whom?" I asked. "For my boy, of course."

"Oh, that simplifies it," I said. "A good many of these advantages in the catalogue are not for him." Then I took up the financial column of the morning newspaper and read: "The capital structure of a company means little to most investors, and yet it is most important. There is a vast difference in investment merit between the common stock of a company that has no bonds or preferred stock ahead of it and the common stock of a concern that has so many other security issues in front of it that it represents nothing more than an attenuated equity.

"You can figure out how much value to your boy will be the courses he will never take and the noted professors he will never meet. Perhaps a smaller

college in which he could have a larger part might be better for him. In the big college he might have only an attenuated equity."

VI

"I am thinking," said Bagster, "of establishing a branch office in Washington. There seems to be a demand for it from conscientious, hard-working members of Congress. Here is a letter which shows a distressing condition.

"Dear Sir: Seeing your advertisement, it occurred to me that you might be able to do something for a deserving and much misunderstood class of American citizens. They are curiously called Representatives. When I was elected to Congress from the ninth district of my state, I labored under an altogether erroneous notion of what constitutes representative government. I supposed that the people of my district, not having the time or the special knowledge to deal directly with the specific questions that might arise during the session of the national legislature, had asked me to do some political thinking for them. Having the opportunity of listening to the debates and consulting with my colleagues, I could make decisions in regard to matters of which my constituents were ignorant. I now see that this was a great mistake. The alarming increase of literacy, cheap postage, and the radio have undermined the old foundations of representative government. My constituents know more about what is going on in Washington than I do, and they lose no time in telling me so. While I am acting as chore boy, they are making up my mind for me. They tell me how to vote on a bill which I have not had time to consider. I have no longer leisure to read my letters. I weigh them. You would not believe how many pounds of peremptory advice I

receive every day. As for telegrams, they are as the sands of the seashore, and they have a curious way of confirming one another. Hundreds of my constituents will rush simultaneously to the offices of the Western Union Telegraph Company and express themselves vehemently in exactly the same language. They do not argue — they decide. The only liberty I have is the liberty of anticipating what they are going to tell me to think. If this keeps on, the government at Washington will be a government by Telepathy.

"I am not complaining. It is a glorious thought that public opinion can express itself spontaneously on every new question with such terseness and timeliness. But is it public opinion? Who are the promoters who are putting it on the market? There must still be a good many people who have not acquired the habit of telegraphing to their Congressmen. Perhaps some of them rather admire a Congressman who has opinions of his own. Perhaps they would prefer to have him now and then make a mistake of his own rather than make all of theirs.

"Could n't you help us out? I wish I could drop into your office and get the current quotations about public opinion, so that I need n't be dependent on the opinions that are wished on me by zealous promoters. If your office were on Pennsylvania Avenue, it would be a great convenience in case an emergency should arise in which I had to make up my mind in advance of telegraphic instructions."

At this point I interrupted.

"I hope, Bagster, you did n't encourage that Congressman too much. He thinks his constituents have an undue influence over him, and that he could legislate better if they would let him alone. Perhaps he could. But this government is not arranged for the

convenience of Congressmen. This is a government not only of the people but *by* the people.

'By the way, there's a bill coming up for the benefit of the whole people. We must get busy and work up public sentiment. It's your business, Bagster, as well as mine, to get that bill through at once. I'd tell you about it if you had leisure, but as you have n't you must

take my word for it. That's the way I did when it was brought to my attention by persons I have confidence in. We are at the parting of the ways. Send a night letter to your Congressman telling him how much the people around here are wrought up about it. I advise you to do it now.'

'Oh,' said Bagster, 'I'm here to give advice, not to take it.'

THE TEST

A CHAPTER IN 'COMING OF AGE'¹

BY HELEN DORE BOYLSTON

June 14, 1918. — LONDON! Our leave, Molly's and mine, came through the tenth and here we are in London. O-o-oh! I'm all out of breath and glad of it. We have n't stopped a minute since we've been here. Dinner at the Savoy and the Troc. and Romano's and the Picadilly; lunches, matinées, tea at the Army and Navy Club, the theatre, dancing at Murray's — whee-ee!

Jerry is here, and his Major with him. The Major fell to me. I don't like him much. I might have liked him better if I had n't known that Don Gracie is in town. I've missed him at every turn. He went to our hotel looking for me the day after we moved to the Nurses' Club, and the people at the hotel said they did n't know where I had gone! It makes me sick! I'll bet I never see him again, and he was such a peach!

I've got scads of new clothes. I don't know what on earth I bought

them for. My leave lasts two weeks, and I'll never wear 'em in France, and by the time I have another leave they'll be all out of style. But it is so nice to wear silk undies again, and to dress for dinner, and to sit in a clean white room having my hair done, and to look in the shop windows and speculate deliciously on what I will buy next. I am young again and alive, and there is no mud.

June 20. — Mr. Blake is in town. I went out to Epsom with him Tuesday to play golf. He plays well, and of course I had to poke my nose in where it did n't belong to see how he did it. The result was that, standing too close behind him, I got in the way of his swing, and he hit me a crack with his driver that cut clear through to the bone. Being on my forehead, the cut bled enthusiastically and scared him almost to death. He thought he'd fractured my skull. I did too, for a little, but I guess he did n't. He took me to a

¹ An earlier installment appeared in the September issue.

near-by Canadian Convalescent Camp to have it sewed up, and I had all I could do to keep him from carrying me. They sewed me up with a rusty needle, and I might say that I've had things done to me that I enjoyed more. Still, it was n't too bad, and I don't think it will leave much of a scar.

Last night Molly and Anne Murray and I had dinner at the Royal Automobile Club with Mr. Blake, John Grant, General Grey, Strong of the International Shipping Board, and the man who is financial advisor to the British War Office.

Strong is a New Hampshire man, and was delighted to find that it was my state. Oh yes, and Jerry was there. I almost forgot him.

I was interested in looking around the table.

With the exception of Jerry, every man there was a power in his own world. They were all men who had 'done things.' John Grant was undoubtedly the most interesting. He tells a story magnificently.

They sat there paying three girls all the little foolish attentions that women are supposed to like — the silly, insincere speeches, and anecdotes told in words of one syllable in order that our feeble feminine intellects might grasp the point, and so forth. Not one, except Jerry, gave us credit for having minds of our own. I felt an idle curiosity concerning the women they knew. I should like to see some of them, and to know what part they have played in the lives of these men. Obviously women are to them only a means of amusement, not to be associated with the real things of life. I wonder if all men are like that at heart. They seem to be except when they are very young, like Jerry.

We went to the theatre after dinner, and going home General Grey tried his darnedest to get me alone in a taxi.

I would n't go alone in a wheelbarrow with that man. Every time he looks at me a horrible light comes into his eyes. It gave me cold chills. I attached myself firmly to Molly and Jerry, much to Jerry's disgust. He did n't understand. He's not old enough yet to be rotten. Molly understood at once. Women always do. And all the way home we kicked each other's shins mirthfully, while Jerry and the General sulked. It was so ridiculous. How can these mighty lords of creation expect us to take them seriously? Here was a young and exceedingly handsome subaltern grumping in one corner of the taxi, and a thin, white-haired General sitting in the other corner gnawing his moustache with a meat-axe expression — and all because they could n't have their very ownest way. Neither of them spoke a word until the taxi stopped before the Nurses' Club.

Molly and I simply shrieked when we got upstairs. But I was sorry for Jerry. He does love Molly so. I'll have to explain to him to-morrow why I spoiled his ride home.

June 24. — I'm beginning to be a little homesick for camp. The excitement of leave in London is beginning to wear thin. It's not very satisfying. Molly, of course, is willing to stay forever. But she is engaged to Jerry, and he is here, which makes a difference.

June 28. — Home again! I wonder why I went away. We arrived in camp with exactly one shilling between us, as is usual after leave.

London was wonderful, but not so wonderful as my hills, all green in the morning sunlight. It's so nice to wake up in the morning and hear the old familiar camp-noises. Even the fact that our water supply has given out and we can't have any baths does n't seem to matter, it's so good to be back.

July 22. — We are a little busier than we were. Just small casualties. A U. S. troop train passed me in Camiers yesterday — the first American soldiers I've seen. Immediately there was a yell of 'Look, fellers, there's a Yankee girl!' They howled and waved their hats until the train was out of sight.

I could n't yell because of the lump in my throat, but I waved back and grinned.

July 30. — To-day we did have a delicious time! The Fourth Cavalry Field Ambulance, which was billeted at Widem, has been moved to Bernville, and they invited Ruth, Mary, and me over for the day. Which really meant tea, since it takes half a day to get there. They came for us in a strange vehicle which seemed to be a cross between a prairie schooner and a steam-piano wagon, the reason being that there is some vague rule of the British War Office to the effect that Sisters can't go riding with officers in open wagons. I don't just get the idea, and I'm not sure that that *is* the rule. None of us really knew. The War Office issues so many rules. Anyway, in order to be on the safe side they brought this thing to take us out of camp. As soon as we got on to the Widem road we crawled outside, and beyond Frenq Captain Shone met us on horseback. Colonel Pitts had come over on horseback with the wagon, so I borrowed Shone's horse, and the Colonel and I disappeared down the road in a cloud of dust, leaving Ruth and Mary to ride with Gavin Argo and Shone. Jove, but it was good to be on a horse again!

We stopped for tea in a grove by the roadside and arrived in Bernville just in time for supper. We had a delightful time. And they took us home in an ambulance — which sounds a little odd, but is n't.

August 8. — We've had a fine string of air raids, but not much work. The atmosphere of camp is changing. I can't put my finger on what's wrong, exactly. I speak from a social point of view, of course. I don't know whether it is because we are n't working hard enough, or because the nervous strain of it all is wearing us down. But there is a vague tension and unrest in the air. People who used to be quiet and not very much interested in the social doings of camp are blossoming out amazingly, and those of us who always were interested are growing more and more hectic. What's the matter with us?

I have an idea that we are going to be very busy again soon. It has been rumblly all day to-day, and part of yesterday too. And the sky toward the north was very red last night.

August 12. — No new convoys came in during the night, so we got caught up with the work, and quit at five this morning. I'm working with Major Cottis now. Like him very much.

I do so love the atmosphere of the theatre. I noticed it particularly last night because I had a little time to think. Lunch was early, and we were allowed a twenty-minute rest afterward, so we climbed up on the tables and sat, a row of white goblins, in the flare of the primus stove. Except for that one spot of light the theatre was dark. The boys, lying on stretchers around the coal stove, were barely visible, just dark blobs that stirred now and then, and coughed. Through the windows, away to the north, the sky was red again, and the rumble of the bombardment came faintly.

After a little we woke up to the fact that we were having recess and began to chase one another around the tables with basins of water. Somebody poured at least a quart down my neck. We talked and sang and hung out the

windows watching the light in the north. Major Cranston was like his old self again. His brown eyes gleamed with mischief, and for the first time in many weeks I heard him laugh aloud. I'd almost forgotten he could play. He's been our chief for so long now that the man was almost lost in the surgeon, and it seemed as though he had always been operating, his eyes intent and his fingers flying.

It's a great life — this. I'm glad I was n't born too late.

August 15. — The push is nearly over for the time being, I think. Anyway we are getting time off again. Day before yesterday Ann and I went down to the beach and spent the day, just lying around. It did Ann a lot of good, for I let her talk about Johnnie as much as she liked, and she just poured it out. She told me all about her engagement, and about her honeymoon of a month, and all the time she was telling me about it there was an unearthly light in her eyes that I did n't like at all. When she came to the part of the story where she got the telegram from the War Office saying, 'Captain John Peyton reported missing,' and told me how she walked the streets of London all night, in agony, her face became so drawn and white I thought she was going to faint.

She is certainly on the verge of a breakdown of some kind unless she hears one way or the other. No reasonable person could believe that the boy was alive, but you can hardly expect the bride of a month to be reasonable about the disappearance of her husband. His squadron officers have told her that what was believed to be his plane was seen coming down in flames, over the German lines. The German reports for that day say that three planes came down behind their lines and that only one was a Bristol Fighter. Johnnie's plane was a Bristol

Fighter, but the German report said that the bodies were so badly burned that identification was impossible.

In the face of this Ann insists that Johnnie is alive and in prison somewhere, and she believes that he will get word to her some way. Everybody in camp, being imbued with the English idea of not showing emotion, refuses to let poor Ann talk, and she is repressed almost beyond endurance. It nearly finished me when she said with tears in her eyes, 'I shall tell Johnnie when he comes back how good you have been to me, and how patiently you have listened to my ravings. He will want to meet you. You will be the very first one.'

I could hardly bear it.

August 22. — I've bought a dog! A month-old police-dog pup. I've wanted one so long. Bought it in Paris-Plage.

I was a little worried about the Colonel's attitude. He is getting very tired of all the animals that are springing up around the camp, and I have n't yet forgotten the day he came into B-2 and my kitten shinned briskly up his leg. But I knew I'd have to have his permission, so I went boldly to his office, the puppy under my arm, hoping that the fat foolishness of it would melt him. I put it on his desk, and it waddled across his blotter and fell plunk into the Colonel's lap. He grinned like anything, and I said, 'Please may I keep it, Colonel?'

'Hell! Yes. Don't blame you,' said he, patting the pup. 'Here, take the damn thing away.'

And I took it, rejoicing. I've named it Pat. It's anything but an original name, but he looks as if his name was Pat. I do like dogs! And the Colonel is a darling.

August 29. — The push is still on, but I'm not doing *anything*. They've

taken me out of the theatre! I'm loafing! And everybody else is killed with work.

You see, I must have been more tired than I realized. I had n't slept for about forty-two hours, but, for that matter, neither had anyone else. The crowd in the theatre were fainting all over the place. Pratt is the nurse in charge of the theatre just now, and she walked up and down between the tables with a bottle of aromatic spirits in one hand and a bottle of brandy in the other, ready to pounce on the next person who wilted.

It must have been about 3 A.M. night before last. I was working with Eddie Welles. I remember it quite distinctly. I was nearly asleep and I suppose I was swaying slightly. But it was from sleepiness. I never faint. Anyhow, I chanced to look up, and there was a canary, in a cage, hanging from the ceiling of the theatre. I grabbed Eddie by the arm and said, 'My Lord, Eddie! Look at the canary!'

'Where?' said Eddie.

'Right there, you idiot! Can't you see it?' I snapped, pointing at it. 'Gosh! It's gone now.'

Eddie looked at me queerly for a moment, and then went on operating. I got sleepier and sleepier, and presently everything in the room faded except the glow of light on our patient's red blanket, and on the square of flesh we were working on. I looked up at Eddie to see how he was standing it. He had been growing steadily whiter for some time, but when I glanced up at him I was absolutely stunned to see that Major Cranston was standing there, not Eddie at all. I began grabbing sponges and snaps. The Major requires lively assistance. Then I heard Eddie's voice saying, 'Whoa there, Troub, what's the rush?' And there was Eddie, and I remembered that Major Cranston was up the line.

I grinned rather sheepishly. 'Sorry, old thing. I thought you were Major Cranston.'

When the op. was finished Eddie went over and talked to the Colonel for a long while. I did n't care.

Some time later — I don't remember what I was doing — the Colonel walked over to me and said, 'Look here, Sister, you go off duty and go to bed — and you stay there!'

I started a protest, but it was no good. The Colonel roared at me, 'Damn it! Go to bed!'

I went.

And I slept all day, all last night, and most of to-day. This noon the Colonel came over to see me and soothed my ruffled pride greatly. He explained that he had sent me off because he had seen for some time that I was working on my nerve and that I was nearly at the breaking-point. And that he did n't want to see a good operating nurse ruined, and so forth. Anyway, he made me feel a lot better. And he said I could go on duty again as soon as I wanted to, but it would have to be on day duty, and he'd suggest to Matron that I go on a medical ward, where the work was n't quite so hard.

He's a dear.

September 1. — The season has reached the uncertain lingering stage between summer and fall. I shall be glad when the fall is really here. I love the blaze of color, and the tang in the air. It creates in me a deep satisfaction in something quite unexplainable — and yet there comes with it a queer haunting pain, a feeling of its being the beginning of the end.

This afternoon we went into a cup-shaped hollow in the hills, and I lay down under a tiny lilac-tree and listened dreamily to the chatter of the leaves. I could see the whole range, the wheat and clover fields, the ploughed land, a

fragment of camp, the château, and a long stretch of blue that was the sea. The grass was long and soft, and Pat scrambled about in it, whiffing at all manner of things. Every few minutes he came tumbling riotously back to slobber in my ear. When it was nearly tea-time we came down, racing madly over the stubble. Pat's silky wolf's ears turned back in the wind, his nose was up, and his fat tail wagged frantically. We tore across the football field and into camp, much to the amusement of everybody on the piazza.

I poked Pat into his kennel — at which he swore horribly — and then went off to tea feeling one hundred per cent.

I wonder what goes on inside Pat's furry head. I wish I knew.

September 5. — The Hindenburg line has broken!

Camp is wild with the excitement of it. Perhaps this is the beginning of the end. And if it is — what will happen to us? I had forgotten that there might be an end. That some day I might be back in America, and it would be peace-time once more.

We got our first stretcher-convoy in months, yesterday, and since then they have been coming in steadily. The tales the boys tell are magnificent, but how worn-out the poor dears are! This morning I arrived at one youngster's bedside just in time to prevent a lively attack of hysteria. They come out to France younger and younger. This lad was n't a day over seventeen.

No air raids since the push started.

September 7. — Still very busy. We have some very heavy dressings now. One that I did to-day almost made me cry — and I'm not a crying person.

The lad was a Canadian, about twenty-two, with a frightful arm. Elbow joint smashed, swollen stiff, and

full of gas gangrene. In getting off the dressing I *had* to move it some, and though I was as careful as I could be I could hear the bones scrunching and grating inside. Then I had to pull off hard, dry sponges, and pull out yards of packing that kept catching on the splintered bone. That lad just turned his head away, and never made a sound — did n't even grit his teeth. Once, accidentally touching a raw nerve with my forceps, I hurt him terribly, and he turned his head to see what I was doing. I saw that his eyes were full of tears, and the pupils enormously dilated, but not a word out of him. No groaning, no 'Please wait a minute, Sister.' Just silence. I choked for an instant, and then burst out, 'Oh, I'm awfully sorry, lad!' And he said, so gently, 'It's quite all right, Sister. Carry on.'

When I'd finished, and was tucking him in, he looked up at me with a charming smile, and said, 'You're very gentle, Sister. Thank you very much.'

I could n't say a single word.

September 12. — Lovely long letter from Daddy. He is such a good sport! If he only knew how much he helps.

One of my boys, — only sixteen, — with a gunshot wound in his leg, made a frightful fuss while I was doing his dressing this morning. I don't think I hurt him much. I know when things really hurt. But I had n't the heart to scold him, he was such a child. When I was through he looked up with an ashamed grin and said, 'I'm sorry, Sister. I'm awful, are n't I?'

I told him no, I thought he did very well. Which was the truth, and he was so pleased it was pathetic. 'I'll be good to-morrow, Sister. See if I'm not,' said he earnestly. He won't, of course, but it does n't matter. They are such dears.

We had a dance last night. Jack Macpherson was there. He's Argyle

and Sutherland, and their uniform is stunning. He was wearing dress uniform last night — complete even to the jeweled dagger in his sock. Oh yes, and he was wearing a monocle. It was too funny. He danced with me a lot, and the monocle kept falling out and whacking me on the head, so at last he left it out altogether. He is a beautiful dancer, but not too strong on brains. Not that it matters, however. I can find people enough to talk to when I want to talk, and not everybody can dance like Jack.

September 16. — The French and Americans are doing a lot of heavy and successful fighting, we hear, but the Northern Front has been comparatively quiet since the rains, so we're not working very hard. It's interesting to realize that the backs of our minds are concentrated day and night on the Front. Yet consciously we go about thinking of almost everything else.

For example, deep inside me I wait with a strained intentness for the least bit of news from the war. I don't notice that I'm doing it until the news comes, and then I fairly snap at it. Meantime my conscious mind is tremendously interested in my own little world. I took Pat to the ward to-day, and he promptly immersed his entire head in a tin of orange marmalade. I had a fearful time getting it off. I could have wrung his fat neck, until I got a good look at him after the tin was removed. Then the heart of me melted into laughter. The marmalade dripped from his whiskers and eyebrows, a piece of orange was hanging to his ear and wagged slowly and ruminatively while his little pink tongue ran back and forth over his nose. He was satisfied with himself and the world.

September 20. — I had the P.M. yesterday, so took Pat and we went over

the hills and back into the country. We had a nice day. At least I did. I don't know how Pat feels about it. I suspect that he finds the world an alarming place. First he tried to walk on water — a mill stream four feet deep. He rose to the surface, well smeared with slime, clambered out philosophically, and shook himself under the nose of a highly indignant goat. The goat butted him briskly, and he fled to me, whimpering, like the baby that he is. Ten minutes later a rooster tried to pick his eye out. Pat braced up to him bravely, though he was badly scared, and, seeing that there would be real trouble in a moment, I interfered, and carried him the rest of the way. He'll soon be too big to carry.

Coming home across the fields, with the wind from the sea in my face, poor tired Pat sleeping heavily on my arm, and the dusk closing down around us, a deep contentment grew up within me. It seemed to me that there was nothing more that I wanted than just what I had at that moment.

September 29. — Had dinner with Jack as usual, last night. I took the dog along and he behaved beautifully except for one thing, which was so delicious I must tell it. Jack is so easy to tease.

We had dinner at the Lac and, as it happened, Jack forgot to send his orderly down to get one of the little rooms for us, so we had to eat in the big dining-room. Suzanne was very much upset — we go there nearly every night — and wanted to know if the Captain would mind the big room. We told her no, it did n't matter, so she gave us a table near the door. Pat, being well trained, slipped under my chair and lay down without anyone seeing him.

There was an English V.A.D. at the

table next ours, with an Australian colonel, and a little farther along were four officers from Jack's regiment.

When Suzanne appeared with our dinner it was too much for Pat's self-control, and from under the table he planted two wet and muddy paws beseechingly on my knee. Just at that moment there was a silence, and I remarked in urgent tones, 'Darling, take your dirty paws off my knee!'

Jack turned a dull purple. Every one of those officers turned to look at him and grin. The V.A.D. strangled in her napkin.

I promptly kicked Pat under the chair, and fed him things furtively to keep him from showing himself — Jack meantime imploring me to let him come out where he could be seen. I laughed so I could hardly eat, and every time I looked at Jack I went off into another fit. He was crimson. 'Damn you, Troub, you're a devil!' he said feelingly, from time to time, and assured me that the whole thing would be regiment property by to-morrow.

Whenever one of the officers grinned at anything, Jack turned green, and once when the V.A.D. giggled I thought he was going to burst into tears.

All I have to do now, to set him off, is to say sweetly, 'Darling — your dirty paws!'

October 10. — Dinner with Jack on Tuesday.

October 18. — Walked down the beach road this morning with Pat. He wagged along beside me, looking up every few steps with adoring brown eyes and gurgling in his throat whenever I noticed him. I talk to him a great deal — mostly any nonsense that comes into my head — and, though he can't understand, it is very obvious that he feels flattered. He's very pretty in the sunlight. Almost all his fluffiness is

gone, and the sun glistens on the short black hairs on his back and turns his eyes to amber. If I sit down he clambers into my lap and sits there, perfectly contented. He scarcely ever leaves me now, even to investigate things, as he used to. I think he must be getting neurotic. But all the same I feel rather flattered myself at such persistent and ardent attention.

October 22. — Pat is dead.

It must be so. I saw him lying by his kennel, quite stiff, but I can't realize it. He crawled out, trying to reach my room, and there he was — dead.

He ate something on the beach — I don't know what. And he was very sick for two days. I stayed up with him both nights and tried not to look too often at his imploring eyes. I was on duty when he died, and Matron came over for me. I knew the instant I saw her face that he was dead, but I could n't ask her and she simply could n't tell me. I learned afterward that she and Joy found him, but Joy funkled telling me, and waited by him until Matron came for me.

Kipling says, 'Don't give your heart to a dog to tear.' I agree.

I went over and picked him up in my arms, and something caught me inside and almost strangled me. I laid his limp little body down gently, and went back to the ward. Neither Joy nor Matron spoke a single word — for which I was very grateful. Once on the ward I went to the office and shut the door. I had n't known it would hurt so.

After a while the door opened and one of the boys came in, a Canadian lad, about nineteen. He took a look at me and said, 'For God's sake, Sister, what's happened?'

I told him and he sat down beside me, with his eyes full. That was the last straw. I put my head down on the blotter and tried not to let go, but it

was hard work. Presently he put his hand on my shoulder and said gently, 'Gee! I'm sorry, Sister. I know how it is. I had a dog once.'

And then he went away.

That's all. My little brown comrade is gone. The next thing is to forget about him. There is no sense in letting it hurt so much.

October 24. — We had a meeting to-night, to discuss the prospects of a Halloween masquerade. I'm chairman of the entertainment committee, so have to provide the music — thank the Lord.

I don't know what I'm going to wear yet. Jack and I thought we'd hop a lorry into Boulogne, Tuesday, and do our shopping and that of the crowd. It is going to be great fun.

Peace talk is growing. The end seems near. The French have reached the Danube, and if they ever get into Germany I can find it in my heart to be sorry for the Germans. Yet, one can't exactly blame the French.

The hospital, meantime, is overflowing with flu. We've had it every year, of course, but nothing like this. The boys are dying like flies. Those of us that have been here so long and had it before are n't very sick, but the new unit which has just come over has it badly. We hear, vaguely, that it is spreading all over the world.

Incidentally I'm running a temperature. But it's very likely a return of my old friend, trench fever. I had it all last winter, and this does n't feel like flu. Anyhow, this is no time to be sick. I'm going to that masquerade.

October 31. — Still running a temperature — about 102 or 103, daily. I've got a sore throat, too, which is a bit off the programme. But it is n't very sore. I'm keeping the temp. down with asperin and quinine.

November 6. — Well!!!!

Here I am, in #46 General Hospital at Étaples, with diphtheria.

It was n't the flu after all. But anyhow I went off with a blaze of glory, so to speak.

The masquerade was a grand success. I took quantities of quinine, and I felt gorgeous. I never had such a good time in my life. The costumes were all good — every single one. I have never danced better. And oh, how young I felt, and how alive! It was worth it. Quinine and all!

Once, between dances, the band began, very softly, to play over something they were going to play for the next dance. I, standing at one end of the room with Jack, in my pierrot costume and soft slippers, started to clog a little, gently. The band saw what was going on and struck up, and I clogged. Golly, how I clogged!

After everything was over I had a fierce chill, and Jack, scared stiff, carried me down to my hut in his arms.

Next day I went on duty, became delirious on the ward, and was lugged off by my orderly.

So here I am. I've developed a heart and a liver, and I'm as yellow as a cow lily. Have to lie flat on my back and be fed. For three days I lay motionless all day long, not wanting to move or speak. I was content to watch the tips of the pine trees swaying against the sky outside the hospital window. Then Ann Peyton joined me, also with diphtheria. We have n't an idea in the world where we got it, and the camp is in a panic. *Everybody* has to have throat cultures taken every day, and poor Jardine has to do it all. I'll bet she's cursing me!

Since Ann came I've come to life again. We are shut up in a room by ourselves, and we spend the day shrieking with mirth. The girls write us every day, gay letters containing cartoons —

that's Molly — and odes — that's Joy — and humorous skits — that's Mary. Jack has wangled permission to see me, and comes over every afternoon, either on horseback or motor bike, and tells us all the news and gossip. He's a dear old thing if he is stupid. Molly and Jerry have been over once and talked to me through the window, bless their hearts.

The peace talk continues. The German navy is to be dismantled, all submarines are to be sent to England, Alsace-Lorraine goes back to France, the German army is to be disorganized, and twenty miles are to be taken off the German frontier. Sounds great, but I wonder how much of it they'll really do. It does n't seem to me this is the time to stop. However —

Meanwhile the Allied armies are carrying on. The searchlights still sweep the sky at night, and long lines of weary lads still trudge out of camp and back to the line.

November 11. — In ten minutes the war will be over. I say it — just like that. Hostilities are to cease at 11 A.M. and it is ten minutes to eleven now. It is incredible that one can measure the coming of peace in actual units of time.

I lay awake all last night, thinking. What are we all to do now? How can we go home to the commonplaces of civilian life — the never-ending, never-varying petty routine?

And #22 General Hospital — that vital, living thing, saturated with the heights and depths of humanity — will become a slowly fading memory of our youth, of the days when we really lived.

My brain reels.

And there go the bells! And the sirens! And drums, and bugles! And cheering that swells louder and louder. The war is over — and I never felt so sick in my life. Everything is over!

But it shan't be. *I won't stop living!* *I will make my life what I want it to be!*

November 19. — I have n't felt much like writing lately. My temperature has been up and down, up and down. My doctor Major says, 'Trench fever.' But he is planning to get me out so that I can be back in camp for Thanksgiving, and then, if #22 is not leaving for America right away, I am to have leave in the South of France.

They move me out of doors in my bed, now, and I lie for hours, thinking, trying to readjust myself to the change I shall find in camp. And to the change that I find in myself. The war has done strange things to me. It has given me a lot — and taken away a lot. It has taught me that nothing matters, really. That people do not matter, and places do not matter, and things do not matter, except for a minute. And the minute is always now. And there will be another right along.

William Blake says: —

He who bends to himself a joy
Doth the winged life destroy.
He who kisses the joy as it flies
Lives in eternity's sunrise.

I guess he's right.

Ann Peyton went to Blighty Tuesday. As soon as she heard that the prisoners in Germany were to be returned within ten days she almost went crazy. She *must* get back to England, in case Johnnie should arrive before her. Over and over she said to me, 'Oh, Trouble, what if he should be waiting in Waterloo Station when I get there! It does n't seem as if I deserve so much happiness.'

What could I say?

I got hold of the Major, told him the situation, and he agreed with me that she would be better off with her people when the final crash of realization came. He sent her home at once.

December 2. — I arrived in camp in time for the Thanksgiving celebration, and could n't resist going to a dance. And I danced till four in the morning.

Joy gave me the devil. I don't blame her. It *was* an idiotic thing to do. But it apparently has n't hurt me any.

Jack got into a fight with an Irish major who quite innocently asked me to dance twice. Can't have that. Where does Jack get that idea that I am his private property? And after all he does n't care a hang about me, really. It is only his vanity. And he likes dancing with me the whole evening, and feeling that he is a devil of a fellow, and that other men would like to dance with his girl but don't dare ask because he's such a grand big strong man. *Huhl!*

Camp has already taken on a different air. There's a gradually increasing undercurrent of excitement, an uncertain clinging to all the old familiar ways. I suspect that this is only a forerunner of a much worse feeling that is going to come upon us later. But we are afraid to look ahead.

My leave to the South of France is due the sixth. I shall be glad to go — to get away from crowds of people, and the rain and mud, into warm summer sunshine.

December 7. — Am writing this on the train. I left Paris last night at eight o'clock, after having almost missed the train at Boulogne.

There are twelve other nurses also going to convalescent places in the South of France. There are three Australians and an English V. A. D. who seem awfully good scouts, but the rest appear more dead than alive.

December 9. — The Australians have gone to another villa, and the English V. A. D., whose name is Kendall, and myself are stuck with the ancients. Kendall is a peach. I like her a lot.

We went in to Mentone for tea yesterday. It was n't nearly so attractive as I'd expected. Besides, they

did n't give us anything to eat for tea, and the service was rotten.

December 11. — We went to Gorbia, a tiny village far up the mountain, and had our lunch there. In the square was a tiny café, over the door of which was placed a sign reading, 'Hôtel de New York'! We heard a piano being played inside, so we entered the one room in the place and were greeted volubly by an excited French girl. At the piano, to our amazement, was sitting a tiny withered old woman, ninety years old easily — a blackened cigarette stub between her lips, and her gnarled hands pounding the keys. The instant we appeared she struck up 'God Save the King.' We stood it as long as we could with straight faces and then Kendall tried to save the situation by asking her to play 'The Star-Spangled Banner,' pointing to me as the American. And my soul! What she let me in for! Both the old lady and the girl fairly swamped me, weeping and kissing my hands. I could have died, if I had n't wanted to get Kendall outside and kill her first. Then I must dance with them. And oh golly, I did! It was awful.

December 12. — I spent a very quiet day to-day, reading in the garden. I can't seem to get sun enough. And I'm so tired of these females, with their endless chatter about their hospitals. I'm interested in hospitals myself, but not to the exclusion of everything else.

They — the females, I mean — think I'm a little off in the head. I don't tear around madly seeing all the things that one should see. I spend a great deal of time reading, or loitering in the garden among the roses and orange trees, and I don't trouble to talk with them beyond ordinary civilities. Disagreeable? Of course I am. But what difference does it make? I'm satisfied. The one

difficulty is that they think I must be depressed. And so, with the meaning-wellness of all meddlers, they follow me about trying to cheer me up. And here I am, perfectly happy, and just gloating over the warmth and beauty and sunshine. I only ask them to let me alone, but that they can't do.

Kendall told me last night that they were having fits because I stayed out in the garden in the moonlight until ten o'clock. They were sure I was contemplating throwing myself over the cliff and were considering coming out to look for my body. And all the while I was sitting under a tree gorging myself with tangerines, and watching the moonlight on the water.

December 13. — Kendall is tremendously excited. Her only brother, whom she adores, and who, she told me proudly, is already a colonel, regular army, is coming to-morrow to spend his leave with her. He is to stay at the Officers' Villa, at Cap Martin. She has seen very little of him for years, — he's been in India and Africa, — but he has just been very sick with flu and is coming here to recuperate.

December 14. — Kendall's brother is here. He came to lunch with us to-day. He's not so much on looks, but he is really charming, and by the gods — he is intelligent!

After lunch he and Olive asked me to go over to Mentone with them, and he telephoned to Cap Martin for a Major Williams, whom he met on the train. Major Williams, though married, does not let it deter him, and he fell, hard and flat, for Olive. I don't blame him. She is one of the prettiest and most attractive girls I've met in a long while.

We prowled about Mentone, in and out of the shops, and, after a little, Colonel Kendall and I lost Olive and Williams. How or where I could n't

say, but it did n't seem to matter. I, for one, was perfectly content.

December 15. — I've had a priceless day. I've been playing in the Casino at Monte Carlo. We are n't allowed in, of course, if we are of 'the military,' but Olive discovered that if you are an officer's wife you can get in without a passport if the officer himself vouches for you. So this morning we put on civilian clothes, hid the effect under trench coats, put civilian hats into a paper bag, and departed first of all for lunch at Cap Martin. This Colonel person is becoming interested, very. I'm getting rather that way myself. After lunch we hired a barouche and set out for Monte Carlo, changing our hats on the way. When we arrived at the Hôtel de Paris we shed our trench coats and emerged as perfectly good civilians. I was Mrs. Kendall and Olive was Mrs. Williams. We went across to the Casino shaking in our shoes, but everything went off smoothly and without any questionings. I went in with fifty francs of my own money and fifty of Colonel Kendall's and I came out with *four hundred francs!* Olive, poor dear, had rotten luck and lost everything she had. I mean, by that, everything she took in with her to play with. It wasn't much.

We left the Casino, greatly thrilled, and went over to the Hôtel for tea. I had n't the faintest idea whether Olive and Williams were there or not. I don't remember a thing about them. Colonel Kendall and I sat among the palms, listening to the orchestra playing '*Mon cœur s'ouvre à ta voix.*' I did n't know I was capable of such absorption. It would seem that I am falling in love again.

December 16. — To-day the four of us went to Nice. We saw the town, shopped, and took three hours over our lunch. After lunch Allen shoved Olive

off to the movies with Williams, and he and I went down and sat on the beach. He told me all about India, and Africa, and asked me if I'd like to go there. I certainly would. Things are moving rather fast. He is getting a bit out of hand. But he is such a dear.

December 17. — To-day Major Williams insisted on 'communing with nature,' so we went up the Funicular with our lunch, and roamed about over the mountain all day.

Allen and I went away after a little, and sat on a high pinnacle overlooking the valley and the range, and he told me tales of Tanganyika until my mouth watered. I watched him as I listened, and tried to see him in the scenes he described. He fitted in beautifully. There is strength about him that is by no means entirely physical. One could see that he knew how to handle men, and that he would be fair about it. He has a straightforward mind, and warm human sympathy which is saved from being sentimental by his sense of humor. I can't tell how much originality and imagination he has, for he talks of places and things unknown to me. But I think he has more imagination than the average because he reacts so strongly to beauty in any form. He would be a delightful comrade, kind and tender and humorous.

We talked for a long time. Then he said that he was going back to Tanganyika and, without the slightest warning, without any change of expression, he asked me if I would marry him and go back with him.

I could hardly say, 'This is so sudden.' But it was. I'd rather thought it might be coming, but I was n't prepared for it so soon. I admit that I am in love with him, and that I should like nothing better than to go back to Tanganyika with him. But — I can't marry a man right off the bat

when I've only known him a week, and I'm not at all sure that I want to get married. I said so, frankly, and suggested that we let the matter drop until we have known each other longer.

December 21. — Olive and I left for Paris this morning. I'm very low in my mind. Why does one have to fall in love?

Yesterday being our last day, we spent it on the rocks at Cap Martin. Williams and Olive did all the talking. I wish things did n't have to end. It is true that Allen will follow us in another week — but where shall I be by that time? Maybe halfway across the Atlantic. I wish I'd met him before.

To-day Allen and the Major came with us on the train as far as Nice. Allen wanted awfully to come with us for another hour anyway, but Olive said sensibly that it would be foolish, and Williams, being concerned chiefly about his lunch, could n't see the point at all. I said nothing. And they got off at Nice. The last I saw of Allen was when he was running along beside the train as it moved out of the station, and I reached down and grabbed his hand for one second.

That's the end of that. Oh yes, I know it is. That's the way these things always end.

Oh, well —

BOSTON. One year later. — After my last entry in this, the day we left the South of France, I did n't attempt to write any more. I wanted this diary to be a record of my everyday life in France — something that would hold for me the real atmosphere of the war as I saw it. Events are not hard to remember, but atmosphere is apt to become glossed over. Memory is a tricky thing.

We left camp the eighth of January, for America — before Allen Kendall got

back from the South of France. I never saw Olive again. I still write to Allen, but I shall never see him again, either. He still talks about coming to America, but with less and less enthusiasm. It is as I knew it would be. It does n't matter.

I've tried to settle down, but I'm not happy here, either in my work or otherwise, though I know I ought to be. I am Major Cranston's office nurse, and he is a peach to work with. I like the work, too. But it is n't enough. This is n't living. And I'm so homesick for the old days. Everybody is scattered. Molly is Assistant Superintendent of the Faulkner Hospital. Joy is at the Boston Dispensary doing social-service work. Ruth has gone to Nantucket. Mary Parsons, the only one of us with sense, has gone to Siberia with the Red Cross. The old life has gone for always. But still the memory of the hills cuts like a knife—their smooth outlines gray in the slanting rain, or green in the summersunlight, and flecked with cloud shadows.

I would like to see one more sunset from the top of the range—the camp stretching at my feet, and Pat cuddled contentedly in my arms, blinking at the sea with his amber eyes. The long evenings come back to me when I try to go to sleep at night. The long

evenings beside the fire, with the talks, the plans, the old jokes and catchwords. And the drives, with their endless string of ambulances. How we worked! We gave all that it was humanly possible to give, and life was glorious.

I can still hear the tramp of stretcher-bearers, still remember with aching vividness the sweet patience of the tortured boys, the long hours of night duty, the scream of shells, the comradeship of old and dear friends.

I can't stand it here much longer, in this place where nothing happens and every day is like every other day.

Molly was in to see me yesterday. She says there is a lot happening in the Balkans, and she thinks she may join the Red Cross and go. Would I come with her?

Would I? After she left I put my head down on the desk and gave up to the waves of longing that swept over me. Daddy, I know, wants me to settle down. I hate to go back on Major Cranston. But I'm young! I'm young! Why should n't I live? What is old age if it has no memories except of forty years or so of blank days?

NEW YORK CITY. *February 21, 1920.*
Molly and I sail to-morrow on the New Amsterdam, for Paris!!!!

The world is mine!

(To be continued)

CAN RELIGION BE TAUGHT?

BY CHARLES M. SHELDON

THE question raises a good many others. But suppose we start with a statement made by the greatest teacher of religion the world has ever known. It is more than a statement — it is a command, made to a small group of personal friends, who were without social, political, or commercial influence and, for the most part, uneducated, or at least not educated in any professional definition of the term. The command of Jesus Christ followed this most astounding claim made for Himself: —

‘All authority hath been given unto me in heaven and on earth. Go ye therefore, and make disciples of all the nations, baptizing them into the name of the Father and of the Son and of the Holy Ghost: teaching them to observe all things whatsoever I commanded you.’

It makes no difference what our position is to-day on the question of religion as a part of the education of a human being, so far as this astonishing command is concerned, for the historical fact is that these unlettered disciples of Jesus went out into the pagan world and began to obey the command of their teacher. And they obeyed the command so well that what we know as Christianity was established as a ruling force in the history of the human race.

Was the thing that Jesus told His disciples to teach the whole world religion? How about that? What were they to teach? What had He commanded them to do?

If we are going to be able to answer the question, ‘Can religion be taught?’ we must first of all find out what Jesus told His disciples to teach. When we bring it all together we are amazed to find that the greatest of all religious teachers did not teach any system of theology. All He taught was life as it ought to be lived. That to Him was religion. It was all condensed into two articles of one creed: supreme love of God, and love of one’s neighbor.

But wait a moment. Of course this creed had some detail. It could be expanded into a number of things to be taught. And we find on expanding this teaching that it includes every item of human behavior. This simple thing known as religion means purity, meekness, mercy, peacemaking, justice, kindness, righteousness, brotherhood, forgiveness, faith, redemption, God, future, hope, love — the basic virtues of mankind, about which there cannot be any doctrinal dispute. And in his Epistle we find James defining religion after this teaching of the Teacher: —

‘Pure religion and undefiled before our God and Father is this, to visit the fatherless and widows in their affliction, and to keep himself unspotted from the world.’

But what has the human race done to this teaching of the Teacher of religion? It has woven into His basic teaching about human behavior the most intricate tangle of philosophy and metaphysics. It has made certain credal statements necessary to salvation. It has divided the Christian

world into sects and denominations, some of which have violently denied to others the right to call themselves true Christians. It has magnified the importance of certain words and theories about which Jesus Himself never uttered a word. It has involved the basic matter of human behavior toward God and the neighbor with nonessential and trivial discussions over doctrines that have nothing whatever to do with the way a man behaves. It has built up a system of forms and ceremonies about the thing called Christianity that are as far removed from the teaching of Jesus as He was removed from the scribes and Pharisees of His own time. Jesus never said a word about evolution, about His own birth, about the absolute inerrancy of the Scriptures, about the necessity of assenting to a long doctrinal creed before one could be called a Christian and be saved. In His tremendous picture of the Last Judgment He based the final destiny of mankind on the way mankind behaved, not on doctrinal or theological beliefs. But mankind has not been willing to accept a religion so basic as the religion of Jesus, because it means doing the things He taught. It is, indeed, easier to give assent to the Westminster Confession than to love one's enemies. It is not so hard to believe in the inerrancy of the Scriptures as it is to practise the brotherhood of man.

It is because the whole definition of religion has been obscured and debased by all this doctrinal and formal treatment of it by theologians and controversialists that the problem of introducing the teaching of religion into an educational system has become a matter of debate and fierce argument, and refusal to acknowledge the right of religious training except in the home and in the church. The State has excluded Bible instruction from the

public schools, not because the teachings of the Bible are harmful to the children, but because the interpretations put upon its teachings are so involved in doctrinal dispute and sectarian jealousy that it has been declared to be impossible to teach religion without at the same time teaching vast error and creating endless trouble.

If the reader will pardon a very personal illustration of this amazing fact in our educational life, I will relate what happened a few weeks ago when I was invited to address a high school in a certain state which I shall not name, although it is in the class with eleven other states of this country where the mere reading of the Bible is absolutely prohibited in the school-room. I accepted the invitation from the principal, and we were about to go into the assembly room where the students were gathered when he called me back into his office and with some embarrassment said, 'I forgot to tell you that we are not allowed to say anything about religion in the schools of this state. You will, of course, in your address, bear this in mind.'

'But,' I protested, 'I am going to talk to the students on the subject, "Some Results of a True Education." How can I talk on a subject like that and leave religion out? Religion is the very foundation of true education.'

He looked more embarrassed than before, and replied, 'It will make trouble for me with our school board if you mention religion in the course of your address.'

Then I said, 'I did not invite myself to speak to your students. The invitation came from yourself. But I do not see how I can talk about education and leave religion out. I will save you from all embarrassment or criticism by not making the address at all.'

At that he looked thrice embarrassed. The hour had struck and the

students were assembled. Finally he said, 'Well, go ahead and I'll risk it.'

And I went ahead, and risked it for both of us, and if I remember correctly I said more about religion to that school than I have said in a long time. It seemed to me that they needed it, and I have not heard up to date that the principal has suffered from it.

But here is the remarkable situation that confronts education in the United States to-day. There are 32,000,000 children attending the public schools of this country. In thirty states there is no prohibition of Bible-reading, but custom bars the discussion of religion by the teachers, except the historical discussion or teaching of the religions of the world, like Islam or Buddhism, as they are a part of a history course. In twelve states the use of the Bible in any form is forbidden. In six states Bible-reading is a part of the school course. And the common reason given for all this is that religion cannot be taught with safety — that it is a thing for the home and the church. It is a principle, say the objectors to the teaching of religion in the schools, that Church and State must be separated. That principle, as it was intended by the framers of our Constitution, seems sound. But, while it may be good statesmanship to separate Church and State, it is poor education to separate a human being from religion. And it is a pitiful fact that in this republic there are, according to the census, over 27,000,000 American children and youth under twenty-five years of age who are not enrolled in any Sunday School and receive no systematic religious instruction. In other words, 66.5 per cent of all the youth in America are not enrolled in any religious schools, either Sunday or week day.

But if the Bible or parts of it should be permitted or compelled as a part of our educational system, what would

prevent the teachers from interpreting the teaching according to their own sectarian or doctrinal bias? The whole matter seems to come back to the teachers, as in fact it would have to come. But I have been wondering what sectarian interpretation could be put upon the Ten Commandments, or the Beatitudes; or, for that matter, upon the entire life of Christ. It is a most astonishing fact that the great majority of people do not object to sending their children to the modern Sunday School, where in very many cases the most tremendous religious subjects are discussed by teachers who have had little or no training, and the ideas they put into the children's minds are not always what they ought to be and in many cases are not true. And yet, as the years go by, the average citizen who has attended Sunday School in his own boyhood, and afterward sent his own boy, does not feel afraid of the influence of the Sunday School teaching. It is also a very significant fact that all over this country thousands of fathers and mothers are sending their children away to state schools and colleges where some teachers of philosophy and psychology are putting instruction into the minds of the students that undermines the religious teaching the children have had in the home and the church. But we do not hear of an uprising against the danger of indiscriminate teaching of these subjects by professors whom we should not allow to teach our children even the most elementary lessons of conduct based on the Golden Rule.

Our system of public education covers about every subject of human knowledge except religion. We have long courses in science, mathematics, history, philosophy, psychology, language, and in all of these courses error is taught. I was compelled in my university course to study the lives of

Cæsar, Napoleon, Alexander, Frederick the Great, and take exhaustive courses in the translation of the pagan poets and dramatists, some of whose writings would put me in the penitentiary if I were to try to send the English translations through the post office. I was taught by my teachers in history facts which I have since found out were the statements of violently biased nationalists or misinformed historians who described historical events from the standpoint of the man who tells about a dog fight where his own dog whipped the other, but does not tell the truth about how the fight began. As long as I live I shall have a very confused batch of so-called knowledge in my mind about certain historical events, because I have been finding out after getting away from the schoolroom that a good many things I was taught are not so. I was taught to believe that Napoleon and other killers like him were great men. I have had to make new definitions for myself about some of the so-called great men of history. I have had to take many of them down off the pedestal and bury them in the potter's field. And yet, in the midst of all this emphasis put on the material and militaristic side of human life, the only religious education the schools ever gave me was confined to a few chapel talks and the voluntary religious organization we ourselves started in the academy and in the university.

If it had not been for the religious instruction given me in my home and my church, so far as the public school and university courses were concerned I might as well have studied in Peking or Constantinople the sciences and philosophies and histories I was compelled to take. I hope I am not hypercritical about our educational system, but I am quite sure that the students of my time were more familiar

with, and those of this present time are more influenced in the schools by, the lives of pagan men and women than the life of the Best Person who ever lived. I should not like to say how many books I was obliged to read about the scoundrels and liars and depraved personalities of the human race in the different centuries, beginning with Nero and coming on down to Benedict Arnold. I had to study them and their abnormal careers — but not a word about Jesus or His matchless teaching. That would be too dangerous. And in fact the study of Jesus and real obedience to what He taught is a very dangerous thing. If our educational system should sometime put Him into the course, and if the students should somehow become really interested enough in Him to put His teachings into everyday practice, it would lead to a revolution which would be dangerous to established selfishness in the market place and even to century-old doctrines which have given the human heart a blow instead of a caress, and have made to stumble millions who otherwise would have walked joyously into the beauty and happiness that pure religion and undefiled always imparts.

But someone will say: If true religion is love to God and man expressed in concrete terms everywhere, and if what Jesus taught is behavior, how can His life be taught and studied in the schoolroom without taking into account His personality and the supernatural and miraculous which are interwoven into the very fibre of the story of His life? If the story of His life is taught in the schoolroom, what shall the teacher do with the Gospel narrative of healing, and angels and Heaven and Hell and the Resurrection and the Ascension and all the tremendous incidents that are linked up with the other world? Can religion be taught without teaching a great many things which a great many

people frankly repudiate? How can religion as conduct be separated from religion as faith? How shall the average teacher in a public-school system treat the life of Jesus and teach it so that the parents of the children shall not object to his own personal interpretation of the character and beliefs of Jesus Himself?

In trying to answer these questions, I put them frankly to a number of teachers in different high schools. The very first answer I received was a fair sample of all the others. The teacher said he would simply teach the Gospel narrative as it is actually told by the Gospel writer, just as he would teach the life of Mohammed or Napoleon as it is told by the historian. If the narrative included miracles and the supernatural, that would simply be a part of the history lesson because it was there.

If there is a better answer than that I should be glad to have it. As a matter of fact I believe the seriousness of the problem is more apparent than real, and in practice it would be found that a regular course in the life of Jesus, taught by the average teacher in the public schools of this country, would not become a course of personal interpretation of disputed doctrines, but it would become a study of Him who taught the way of Life. The danger arising from studying and teaching any part of the Bible in our schools is insignificant compared with the danger of not teaching it at all.

Of course, if the general public fears the use the teacher would make of the life of Jesus in the classroom, that brings up again the whole subject of the teacher's character and purpose. And that would suggest a subject for another article to go with this. Of course I do not need to explain my own position when I say that I think a teacher who is going to teach my

children religion ought to be religious, and I hope that is the ideal that all true educational leaders are advancing and teaching.

But what insuperable difficulty would there be in putting the life of Jesus into a public-school curriculum? What theological or doctrinal confusion would arise over the learning of the Ten Commandments in the schoolroom? Is the real trouble over the teachers? Can they not be trusted to teach religion as conduct, not as doctrine? It raises some very serious questions all along the line; and if the educational forces of America are ready to confess that the teaching of religion is impossible on account of the character of the teachers, that confession in itself ought to raise more questions still. Put into a practical form, how many of the readers of this simple paper, as they look over the list of the teachers in their own home town, either in the grade schools, the high school, or the state university, would fear to have the teachers in those schools teach Johnny or Mary the life of Jesus as the Gospel of Mark has given it to us? Would they teach Johnny and Mary that Jesus was a Fundamentalist or a Modernist? Would they try to teach that Jesus was a Presbyterian, or a Methodist, or an Episcopalian? Or that he favored this or that theological doctrine of the Trinity? As I look over the teaching-list of my own state of Kansas I find myself quite willing to trust my boy in the classroom of the teachers in our high schools or university in a course on the life of Jesus, taken right out of any of the Gospels. I do not believe he would receive any more incorrect or biased teaching than he sometimes received from some teachers in my own church Sunday School when he was small. I know some ministers I should not want to trust to teach my boy in a course on the life of Jesus. But when

it comes to interpreting the meaning of Jesus' plain teaching about how the human race ought to behave, I am very confident that the average American school-teacher would not begin to make the false and grotesque statements that some of my teachers made to me about the glory of war and the political economy that was divorced from every ethical and moral standard.

If religion cannot be taught, why did Jesus tell His disciples to teach it? If it can be taught safely only in the church and in the home, how about the millions of youth that never have any religious instruction in either of those places, but are in daily attendance on the public school? If the teachers now employed cannot be trusted to teach religion, is it because they do not have any, or is it because they have a wrong definition of it? Or is religion in the very nature of the case a thing that belongs to the emotions, a thing which one has to learn for himself and which no course in education can teach?

The answers to these questions will depend largely on the way you yourself have been brought up, and on the definition you have of religion. But the need of some form of religious instruction hardly calls for argument or debate. All thinking people agree that fully developed life must have something more in it than the accumulation of facts. Even if the facts are necessary for comfort and physical happiness, there is something lacking. But before the educational and ecclesiastical world will come together in a common assent to this need, both sides will have to make new definitions. The pharisee in

the church is answerable for the distortion of the teaching of Jesus into a burlesque of theology and forms and ceremonies. Religion cannot be taught in our educational system if by religion is meant controversy over matters that are not connected with behavior. But it can be taught and it must be taught if by it we mean what Jesus meant when He said, 'Thou shalt love the Lord thy God with all thy heart, and with all thy soul, and with all thy strength, and with all thy mind; and thy neighbour as thyself.' If that cannot be taught in our educational system, then the system is wrong. If it can be taught, in the name of Him who came to give us life abundantly, let us incorporate it into the very heart of our schools, putting it first of all into the hearts of our teachers. For education without religion is more than a blunder — it is a falsehood; and if we do not teach religion in the schools we deserve to suffer as a nation and go the way of all those nations that have thought more of accumulating facts than of making life.

To sum up: —

If religion is theology, and doctrine, and creeds made over disputed definitions of God and theories of man's destiny, it cannot be taught in our schools.

But if religion is love to God and man, it can be taught anywhere and it ought to be taught in our schools. If it is not taught, our whole educational pyramid will continue to wobble on its pinnacle instead of resting firmly on its base.

UNCLE TUTT'S TYPHOIDS

BY LUCY FURMAN

It was three days before the opening of the quare women's school in mid-August that Susanna Reeves, their visitor from the Blue Grass, rode off behind Uncle Tutt Logan as volunteer nurse for the family of five, renters on his place, down with typhoid. Uncle Tutt was an old man who lived by himself about two miles up Troublesome. He had been, as he expressed it, of a 'rambling natur' in his youth, and somewhere acquired a taste for reading, and now came down frequently to get books from the women's library.

When Susanna stepped into the door of the tumble-down cabin up the hollow from Uncle Tutt's house, the five sick persons — a man and a little boy in one bed, a woman and two little girls in the other — lay in their soiled day-clothing among the dingy quilts; there were no sheets. A boy of seven sat on the floor, trying to pacify two dirty, wailing babies. A piece of fat meat dripped over a meal-barrel in one corner, and flies swarmed everywhere.

'Hit's beyand a man-person,' said Uncle Tutt, with a gesture of despair. 'I never knowed where to begin at. A woman is called for.'

Susanna's heart was in her shoes, but she made no sign. 'The first thing,' she said, 'is to fill the wash-kettle there in the yard and build a fire under it. While you do that, I must try to find a place where these babies can be taken care of. Is there no woman in the neighborhood?'

'Milly Graham is the most nighest,' he replied. 'She lives about two-

whoops-and-a-holler up Troublesome, and is as clever-turned a woman as ever I seed, with not more'n nine or ten of her own.'

Susanna quickly washed some of the dirt off the faces, hands, and feet of the babies, one of whom was two years old, the other less than one, sought in vain for clean things to put on them, and then, with the help of the small boy, George, took them up the creek.

Milly Graham, who was lifting clothes out of a steaming kettle by the water's edge and battling them on a smooth stump, laid down her battling-stick and came forward, barefooted and kind-faced, followed by a train of tow-heads.

'Sartain I'll take 'em in, pore leetle scraps,' she said, when Susanna had explained the situation. 'Two more hain't nothing to me, nohow, with sech a mess of my own.' Gathering both babies in her arms, she sat down on the battling-stump, opened her dress, and offered a generous breast to each. 'I allow the biggest hain't beyand taking the teat,' she said. It was not; indeed, both sucked as if they were starved.

'I heared about Uncle Tutt's typhoids,' continued Milly, 'and I would have went right down; but that-air next-to-least-one of mine is croupy and chokes so bad I'm afeared to leave hit a minute, and all is jest a-getting over measles. Onliest time I been off the place in a year was to the quare women's working, the Fourth of July. I mustered the whole biling and tuck 'em down along, and seed as fine a time as

ever I seed. But that was where they all kotched them measles. I mind you a-being there that day; I allus remembered you from them pretty black eyes and that lavish of black hair.

'Next thing I hearded, you women was all holping with the typhoid down at the Forks. 'Pears like hit strikes 'em as reg'lar as summer. Hit was right sensible for Uncle Tutt to go down atter one of you women. Pore old widder — what could he do? A lone man's the most helplessesst creetur on top of the earth. What possesses him to live thataway, cooking and washing and even milking for hisself, the Lord only knows; no wonder he's a leetle turned. Hit's a pyore pity, and flying right in the face of Scriptor, too. Not that Uncle Tutt keers for that — he's a master hand to rail at the Scriptor, and the preachers, and the Lord. Eh, law! If he did n't cuss God Almighty Hisself when a big wind blowed down the most of his corn a year gone! Said there wa'n't no dependence to be put in Him nohow!

'Them renters of his'n I hain't never got acquainted with; they hain't belongs here — jest blowed in one day about corn-planting time in Aprile. I seed 'em go down one morning about sunup, the man big and stout, with a poke on his back and a babe in one arm, the woman pore and puny and all drug-out from packing tother baby. Most people in these parts don't confidence strangers and furriners, but Uncle Tutt, though he's hard on the Lord, allus was saft-hearted to folks; and he tuck pity-sake on 'em and allowed they could stay and crap for him, and give 'em steads and kivers and cheers and sech-like gear. They allowed their name was Johnson, and they come from Magoffin. Hit's quare, folks being that fur from home; hit's quare, too, they don't never put foot off'n the place. But maybe hit's right. I'll lay the woman's

right, anyways — she's as good-coun-tenanced as ever I seed.'

Returning to the cabin with the little boy, who seemed old and quiet beyond his years, Susanna found the water boiling in the big kettle, and in the teeth of Uncle Tutt's solemn warnings and dire prophecies, 'Hit'll sartain kill 'em to wash when they're sick; I never in all my life and travels heared of sech doings,' and with his very reluctant assistance, bathed the five patients and got them into the nightgowns the women had sent, then cleared away the soiled covers and put the women's sheets on the lumpy shuck mattresses. Then, after meat and meal-barrel had been removed to Uncle Tutt's, the joists and walls were washed down with strong suds, and the floor scrubbed, first with a broom, then with the scrub-brush Susanna had brought.

Uncle Tutt went home to get dinner for himself, Susanna, and little George, and to bring milk for the sick ones; and he was then sent back to the Forks after mosquito-netting, which the women had had brought in at the beginning of the typhoid, and the doctor; for a Forks boy, Doctor Benoni Swope, had just come back from medical school to be the first physician in his community.

When at last the day was almost over, and Uncle Tutt was leaving the cabin to get supper, he said, looking back through the net-curtained doorway to the two white beds, 'Looks pine-blank like a passel of corps laid out in yander. If I was to wake up and find one of them shrouds on me, and a burying-sheet drawed over, I'd give hit up I was everly dead and gone!'

Susanna sat down on the porch and dashed off the following letter: —

DEAR ROBERT: —

This will reach you about the time I had expected to start for home. I was only waiting for the opening of school

on Monday. I hope you'll feel *dreadfully* disappointed when I don't come — Aunt Ailsie to the contrary notwithstanding! I am staying to nurse a family of five, down with typhoid, about two miles up Troublesome. Now don't scoff; of course I know nothing about nursing, except what little I have learned this summer, but anyhow I'm a human being, with a pair of hands and a strong body and a willing mind; and the motto here is 'Learn by Doing.'

If you could have stepped with me into this cabin this morning you'd have had the shock of your life; but if you came now I flatter myself that, finicky surgeon as you are, even you would be pleased. The five patients are in night-gowns, the first they ever wore; the beds are in sheets, the first *they* ever wore; walls, ceiling, and floor are scrubbed, — you should have seen your idle, useless Susanna down on her wet knees! — and the mosquito-netting over doors, fireplace, and all cracks will soon do away with the flies.

One thing only disturbs me; while the father and three children look as if they could stand anything, the mother is terribly weak and sick to begin with, and Dr. Benoni says we can hardly expect to pull her through.

Now don't be foolish about me — I am splendidly fit. I boil all the water; Uncle Tutt brings me food from his house; and both he and Dr. Benoni have offered to 'spell' me at night so that I may sleep on my cot on the porch. Best of all, it's so wonderful to feel that I am at last of some actual use in the world that I am thrilled beyond words. It beats dancing, cards, even the races — can I say more?

Call up Sister and swage her down all you can. And take time from your 'cyarving' to miss me *real hard* occasionally during the next few weeks!

Devotedly,

SUSANNA

Next morning the sick woman, who the day before had said nothing save to assure herself that the babies were in safe hands, lying all day with dull, suffering eyes fixed on the doorway, said weakly to Susanna, while the latter was gently washing her face, 'You look gooder to me than any angel.'

Susanna laid a hand on the drawn, troubled brow. 'I'm so very glad to be here,' she said, 'and everything will be all right now — you must just stop worrying, and rest, and get well.'

Two slow tears trickled from beneath the closed lids. A little later, when Susanna had washed the worn hands and was about to turn away, the fingers closed spasmodically upon her own. 'You don't aim to go away, do you?' asked the frightened voice.

'Not at all,' replied Susanna. 'Not once until you are all well again.'

The woman sighed deeply — a sigh that carried an utmost burden of care and sorrow — and then, as if in apology, said quickly, 'Pears like I'm all worried out, hit's been so long!'

'Yes, I know it has seemed long since you got down, though it is really only a few days.'

The woman shook her head weakly. 'Not that,' she said in a low tone, 'not that!' Then she opened her eyes as if frightened at her words. 'My wits they must be a-wandering,' she explained.

The rest of the day she lay quiet, with eyes, as usual, on the doorway. Her husband, a strong, well-built young man who appeared to be at least a dozen years younger than his wife, also lay always silent, one hand under his pillow, inscrutable eyes on the door.

'She looks to me as if she had some dreadful trouble on her mind,' said Susanna to Uncle Tutt that evening, as she ate her supper of corn bread, milk, and honey under the apple tree in the yard. 'What do you suppose it is?'

'Hit's been that way ever sence they

come, Bill allus silent and surly, Cory narvious as a skairt rabbit.'

'Is he unkind or cruel to her?'

'I never seed him beat her none, or handle her rough.'

'He looks much younger than she does.'

'He's got a reason for hit, by grab. That-air Bill is the triflingest sluggardly do-nothing ever I come acrost! Strikes about one lick with a hoe to her three, and allus leaves her take the bottom row. That's the kind of a cuss he is! But he's a fine-pretty feller to look at, and she worships his tracks in the mud, and works herself pine-blank to a shadder for him and his offsprings, works and worries too.' He stopped and pulled a stem of grass and began to chew on it, then said, in a confidential tone:—

'You mind that-air weepion he keeps under his pillow, with his thumb allus nigh the trigger, and would n't nowise have took away?'

'Yes.'

'And that-air new growth of beard all over his face?'

'Yes.'

'And how he keeps his eyes, like she keeps hern, everly fixed on the door?'

'Yes.'

'Well, the way I riddle hit out, he's maybe a mean man that has got into a leetle trouble somewheres—kilt somebody, say, and is hiding out here. I never tuck the leastest stock in their being from up Magoffin way; I'd sooner believe hit was ary other p'int of the compass; or their name being Johnson, either. No, the very minute I laid eyes on 'em I suspicioned they was hunting a hole to hide in. But I knowed from the woman's face she was a right woman, and I allowed here with me was as safe a place for 'em to hide out as anywhere. If he had kilt ten men, or was the very old Devil hisself, I would n't give him up and break pore

Cory's heart. My sympathies allus was with the women-folks anyhow—'pears like the universe is again' 'em, and God and man confederates to keep 'em downtrod. In all my travels I have seed hit, and hit's been the same old story ever sence Eve et the apple. I gonnies! If I'd 'a' had the ordering of things then, I'd 'a' predestyned the female sect to better things! If replenishing the earth was to be their job, I would n't have laid on 'em the extry burden of being everly subject to some misbegotten, hell-borned man-brute! Yes, dad burn my looks, when I see a puny creetur like Cory there, not only childbearing every year reg'lar, but likewise yearning the family bread by the sweat of her brow, hit fairly makes my blood bile, and ends my patience with the ways of the Lord. Yes, taking Him up one side and down tother, God Almighty sartain does as much harm as He does good, if not a leetle more! His doings is allus a myxtery, and sometimes a scandal!'

Dr. Benoni, after his visit the following morning, shook his head ominously when Susanna followed him to the porch. 'A very sick woman,' he said; 'vitality all gone to begin with. She'll not pull through typhoid.'

'The little girls are so restless, might n't it help if Cory had a bed to herself?' asked Susanna.

'It's worth trying,' he said.

Uncle Tutt, appealed to, said yes, by Ned! Cory should have his last remaining bed, a pallet was good enough for him, and the two men went at once for it, bringing also Uncle Tutt's own feather-bed to put on it, 'her bones being so nigh through,' said the old man. Susanna made up the bed, and poor Cory was carefully lifted into it. Uncle Tutt had his reward when she sighed gratefully, 'These feathers feel so soft to my bones!' A little later she said, wonderingly, 'Hit's quare to have

so much room to lay in — I never was in a bed to myself afore.'

In mid-afternoon, while Susanna was giving her the second temperature-bath of the day, for her fever ran very high, she said deprecatingly, 'I hate for you to do so much nasty work for me — I allow you have sot on a silk pillow all your days!'

'I suppose I have,' replied Susanna, in a startled and contrite tone, 'but I'm very much ashamed of it now, and want to make up for it by being of some use.'

'You so good to look at I can't hardly keep my hands off'n you. I allus did love pretty people. Your hair — I wisht I could feel hit!'

Susanna bent her head and laid one of the feeble hands on the thick waves of her hair.

'Now hain't hit pretty and saft! I follered having saft hair myself when I was young, but gee-oh! that's been so long I can't hardly ricollect hit!'

'Why, you're not that old,' said Susanna. 'People never get too old to remember their youth.'

'Yes, they do. Hit's a long time; seems as fur away as if hit never was; and I'm a old woman — twenty-three year old I am!'

'Twenty-three!' exclaimed Susanna, in utter amazement, for she had supposed Cory at least thirty-five. 'Why, twenty-three is not old a bit — it's young. It's just my age.'

It was Cory's turn to be astonished. 'No woman could n't look as young as you and be twenty-three,' she said. 'You hain't seed sixteen yet.'

'I am twenty-three,' insisted Susanna, 'but I consider it young, not old. You must have been just a child when you married.'

'Nigh fifteen I was.'

'And at twenty-three the mother of six. Good heavens!' exclaimed Susanna. 'No wonder you are worn out!

But you'll have a chance for a long rest in bed now, to get back your strength. I'm here to see that you do!'

Susanna cast an angry glance at the big, husky young man in the bed by the door. Of course it was his fault that poor Cory at twenty-three had forgotten her youth!

It was three days later, a week after her arrival, that one morning for the first time in the sickroom Dr. Benoni called Susanna by her surname. Uncle Tutt always addressed her and the other quare women by their Christian names. At the words 'Miss Reeves' Cory sat up in bed and stared wildly about, only to fall back in a state of collapse when she saw Bill's eye fixed angrily upon her. Susanna and the doctor supposed it was only a manifestation of delirium, and thought no more about it. But when, in the afternoon, the patients were sleeping, and Susanna sat by Cory's bedside beginning a letter to Robert, she was surprised when Cory opened her eyes and whispered, 'What name did he call you by?'

'Reeves,' replied Susanna, in a low tone.

'Where do you live at?'

'In Lexington, in the Blue Grass.'

'Is there many of the name of Reeves there?'

'Not now; our branch seems to have run largely to daughters, and I am the only one of the name left. My parents are dead, and I live with my married sister, who is much older than I. When I marry, the name will have died out, which is too bad, after a hundred years; for we were among the pioneers.'

'Hit's a pretty name, Reeves — I love hit!' said Cory.

At that instant Bill, who had been apparently sleeping, raised himself on his elbow and gave Cory a look that silenced her. Susanna continued her letter:—

DEAR ROBERT: —

How foolish of you to send that telegram! Of course it had to come across the mountains by mail, and it reached me at the same time as your letter. How foolish, too, to make both so mandatory! No, I will *not* 'start home at once.' No, not if it were to my own wedding! I can't desert my post. You would n't have me if you knew the need. Poor Cory is in grave danger. Dr. Benoni says there is not a chance in fifty for her, and oh, Robert, I have just found out that instead of being middle-aged, as I had supposed from her looks, the poor thing is only twenty-three, just my age, and the mother of six! With a horrid husband who lets her take the bottom row in hoeing corn and work herself to death in other ways! Also I believe she is the victim of some dreadful fear that hangs over her like a nightmare.

Glory for you, Doctor Helm! It's fine about old Boone Beverly and the thousand-dollar fee! I fervently hope that every rich old turfman and stock-breeder in the Blue Grass will have appendicitis this fall, and ask you to 'cyarve' on him, so you can pay off those dreadful debts and marry

Your devoted

SUSANNA

Two nights after this the crisis of Cory's illness was reached. Dr. Benoni had spent both nights at the cabin, to relieve Susanna, so that one of them might be always at the bedside with the required heart-stimulant. At times the poor woman seemed almost too weak to breathe.

The second night Dr. Benoni had called Susanna at three o'clock, himself lying down beside the little girls for a desperately needed nap. Bill snored loudly and the three children were fast asleep. Susanna sat by Cory, holding one of her wasted hands.

Suddenly she felt a feeble pressure and heard a whisper: 'Closter!'

She put her head down.

'I'm high gone, hain't I?'

'Oh, I hope not; we don't intend to let you go!'

'The young-uns — what'll become of them?'

'Don't worry about them; they'll be cared for. They have their father.'

'But if Bentons gets him? Sh-sh — don't speak, whisper; they're after him, and Black Shade he won't never stop till he finds him. And then the pore leetle orphans, without ary paw or maw! Listen,' she whispered, desperately, 'you must take 'em to my paw and maw when I'm gone; they'll forgive me then for running off' with Anse — Bill, I mean. He was sech a pretty boy, I had to have him.'

'Where does your father live, and what is his name?'

'In Harlan, on Reeves's Fork of Marrowbone. His name's same as yourn. There's a whole tribe of Reeveses there.'

'Reeves!' gasped Susanna. 'What's his first name?'

'Sh-sh — George.'

'George Reeves!' exclaimed Susanna. 'What other names are in your family — your grandfather, your great-grandfather?'

'Old Winfield was my grandsir', and behind him was another George. Them is the main-chieftest names all through.'

Susanna took the sick woman's hands in both hers. 'Cory,' she said, 'Winfield Reeves was the name of my father, and also of my pioneer forefather who came out from Virginia to Kentucky more than a hundred years ago. Near Cumberland Gap his young brother, George, left the wagon train to hunt a deer, and was never afterward heard of. My people went on to the Blue Grass, fought the Indians, subdued the wilderness, and became prosperous and prominent. They always supposed George

had been killed by Indians. Instead, he must have found the hunting good, and have wandered from year to year in these mountains, at last settling down and founding the family to which you belong. The names tell the story. You and I are the same blood, and blood means a great deal to a Reeves! So now you can trust me to take care of your children if anything happens to you. I will do for them as if they were my own, and will adopt little George and change his name to Reeves. But you must n't die, you must live; for now you have found a sister who will always love you and take care of you!'

The entire conversation, tense as it was, had been carried on in whispers. Through it all Bill's snores had risen regularly; not a child had stirred; Dr. Benoni had slept profoundly.

Cory clutched Susanna's hand. 'You and me the same blood? I hain't surprised, for I loved you when I seed you. Listen! A Reeves allus stands by a Reeves — you won't never tell what I tell you?'

'No, indeed.'

'Well, Anse and the Bentons they had a furse, and he kilt two of 'em. Then he give it out he had went West, and hid out in the high rocks awhile, and then we traveled here by nights. And, being a Reeves, you won't never tell on him, and will keep watch with me for Black Shade, and hide Anse if he comes?'

'Certainly, if it's possible. I'll protect him in every way, for your sake. You can depend on me. And now try to rest and sleep, and leave the worry and the watching to me. Remember, you have found a sister.'

Kneeling beside the bed, she folded the thin form to her breast; and lying thus poor Cory relaxed, smiled, and soon fell asleep.

The unloading of 'that perilous stuff which weighs upon the heart' was the

beginning of better things. When Dr. Benoni left at six, Cory was still sleeping; her pulse was better, her temperature down two degrees. When at last she awoke, it was only by a glance of the eyes, a pressure of the hands, that she and Susanna indicated their remembrance of what had passed in the night. Bill, sullen and watchful as ever, had evidently heard nothing. Cory's eyes, instead of being fixed in that dreadful stare on the doorway, now followed Susanna constantly, hung upon her, feasted upon her.

That evening Susanna wrote:—

DEAR ROBERT:—

I have something amazing to tell you. You have heard us speak of the young brother of our pioneer ancestor, who went hunting one day as they came along the wilderness trail and was never heard of again. Well, he is found — at least, his descendants are, and one of them is poor Cory, the sick woman I am nursing! She belongs in Harlan County. Family names — everything shows there can be no mistake. And she and I are the same age. How easily I might have been in her place and suffered what she has suffered! How selfish we prosperous Blue Grass people are, and how little we realize what is going on in this forgotten section of our state, where many of the people doubtless are of the same blood as our boasted aristocracy!

Almost three more weeks passed. Cory had gained steadily. The three children sat up for a while every morning, usually on Susanna's cot on the porch, and Bill, his splendid frame little impaired by illness, also sat in a chair there, pistol on his knees. This particular afternoon, all had come in for their rest and naps. Cory, the hunted look almost gone from her face, was sleeping, and Susanna sat by her bed

reading a month-old magazine. Uncle Tutt had gone up in the timber to measure and mark the poplar trees he was giving to the quare women for their big settlement-house, taking little George with him.

Suddenly a shadow darkened the doorway. The curtain of mosquito-netting was swept aside. A dark man, on noiseless feet, stepped in. Susanna rose, startled. At the same instant Cory's eyes flew open and she screamed in terror. With a single movement Bill, waking, drew his hand from beneath his pillow and fired, meeting the cross fire of the intruder. Both men continued firing, as swiftly as they could pull trigger, till at the same instant both lurched forward — Bill on his bed, the stranger full-length on the floor, neither so much as twitching a muscle thereafter.

The whole thing had happened in a flash. Cory's shrieks rent the air. Susanna flew to Bill, raised his heavy body, felt for his heart. Not a beat. But a slow trickle of blood welled out upon her fingers. Laying him back, she dashed a cup of water in his face. No response. Turning then to the intruder, beneath whose body a red pool was spreading on the floor, she looked for a sign of life. None there, either. Rushing to the porch, she took down the gourd-horn Uncle Tutt had left with her in case of need, and blew it loudly, once, twice, thrice.

The sound must have carried some of the poignancy of her suffering, for in an incredibly short time Uncle Tutt came plunging down the slope.

They wasted no time on the dead men, but put in all their energies on the fainting, apparently dying Cory, forcing liquor between her lips, rubbing her cold hands and feet, at last seeing the tide of life flow slowly back again.

'Hit might be better to leave the pore creetur die,' said Uncle Tutt.

'She's seed enough trouble without this here.'

'No,' said Susanna, with determination. 'That's the very reason she must live — to see something besides trouble; to get back the youth she has forgotten. I have found, Uncle Tutt, that she is a Reeves, that we are the same blood. I shall make it my business to take care of her and her children, to make life easier and happier for her. Of course she'll grieve for Bill, but grief never kills. A dead sorrow is better than a living one; in time it will wear away. She is young enough to forget.'

Uncle Tutt received the news calmly. 'I'm proud for her,' he said. 'I allow she has fell into good hands.' Then, surveying the scene before him with philosophical eyes, he remarked, 'I knowed hell was to pay somehow. Well, I better get them corps drug out of sight afore she comes to.'

This gruesome task performed, the pistols taken from the clutch of the dead hands, the bodies laid on the porch out of Cory's line of vision, coins pressed down over the staring eyes, the old man stood in the doorway, looking down meditatively at his work.

'Hit hain't often,' he said, 'lightning strikes in the right spot. Hit's more gen'ally apter to hit wrong. I hain't seed hit fall right sence Heck was a pup. But this time hit went spang clean straight to the mark. I allow both needed killing and needed hit bad. I know Bill did! Well, hit's a sight of satisfaction to see jestic fall — kindly cheers a body up and helps up their confidence in the running of things. I'll say this much for Him, God Almighty is a pyore puzzle and myxtery and vexation of sperrit a big part of the time, but now and again — oncet or twicet maybe in a long lifetime — He does take Him a notion to do a plumb thorough, downright, complete, ondivided, effectual good job!'

SCIENCE AND POETRY

BY I. A. RICHARDS

The future of poetry is immense, because in poetry, where it is worthy of its high destinies, our race, as time goes on, will find an ever surer and surer stay. There is not a creed which is not shaken, not an accredited dogma which is not shown to be questionable, not a received tradition which does not threaten to dissolve. Our religion has materialized itself in the fact, in the supposed fact; it has attached its emotion to the fact, and now the fact is failing it. But for poetry the idea is everything.

— MATTHEW ARNOLD

HABITS that have endured for many thousands of years are not easy to throw off — least of all when they are habits of thought, and when they do not come into open conflict with changing circumstances or do not clearly involve us in loss or inconvenience. Yet the loss may be great without our knowing anything about it. Before 1590 no one knew how inconvenient were our natural habits of thought about the ways in which a stone may fall; yet the modern world began when Galileo discovered what really happens. Nobody before Lister knew that ordinary traditional ideas as to cleanliness are dangerously inadequate. The average duration of human life has increased by about thirty years since he upset them. Nobody before Sir Ronald Ross knew what were the consequences of thinking about malaria in terms of influences and miasmas instead of in terms of mosquitoes. The Roman Empire might perhaps have still been flourishing if someone had found this out before A.D. 100.

When such examples are considered we can no longer, in any department of life, so easily accept what was good enough for our fathers as good enough for ourselves, or for our children. We are forced to wonder whether our ideas

even upon subjects apparently of little practical importance, such as poetry, may not be dangerously inadequate. It becomes indeed somewhat alarming to recognize, as we must, that our habits of thought remain, as regards most of our affairs, much as they were five thousand years ago. The sciences are, of course, simply the exceptions to this rule. Outside the sciences — and the greater part of our thinking still goes on outside the sciences — we think very much as our ancestors thought a hundred or two hundred generations ago. Certainly this is so as regards official views about poetry. Is it not possible that these are wrong, as wrong as most ideas of an equally hoary antiquity? Is it not possible that to the men of the future our life to-day will seem a continual, ceaseless disaster due only to our own stupidity, to the nervelessness with which we accept and transmit ideas which do not apply to anything and never have?

Perhaps the most encouraging new feature of modern Western civilization is the number of people who are genuinely asking themselves what they are doing and why they are doing it. General curiosity is waking up; we are beginning to ask pertinaciously what our place in the world really is, and more

particularly, when we think, talk, work, vote, fall in love, read poetry, or take up stamp-collecting, what is actually happening and what is the reason, the point, the value, or the justification of these activities. How are we to decide whether what we are doing is worth while or whether we are doing it well or ill?

In other words we are becoming more critical. Not in the narrow sense of being more apt to find fault, though for many reasons a greater uneasiness is abroad; but in the wider sense in which to be critical is to attempt to judge something reasonably and with a full sense of the whole situation and not merely by unconscious approval or disapproval.

Men are looking around for standards, for reasons why one way of life should be preferred to another. Formerly there was no need to look around. The standards were obtrusively present; and if a man did not know what he ought to think, or to feel, or to do, that was his own fault.

To-day it is not so. Partly because conditions and circumstances have changed (we do not even yet sufficiently realize what a totally different thing modern industrial society is from the society, say, of the seventeenth century); partly because, through the extension of science, reasons which used to be thought sound are now seen to be baseless; and partly from other causes, among which may be changes in man himself, we are in great need of a clear, coherent picture of human affairs. The average man is growing more conscious — an extraordinarily significant change. It is probably due to the fact that his life is becoming more complex, more intricate, his desires and needs more varied and more apt to conflict. And as he becomes more conscious he can no longer be content to drift in unreflecting obedience to his

instincts. He is forced to reflect. And, if reflection often takes the form of inconclusive worrying, that is no more than might be expected in view of the unparalleled difficulty of the task. To live reasonably is much more difficult to-day than it was in Doctor Johnson's time, and even then, as Boswell shows, it was difficult enough.

To live reasonably is not to live by reason alone, — the mistake is easy and, if carried far, disastrous, — but to live in a way of which reason, a clear full sense of the whole situation, would approve. And the most important part of the whole situation, as always, is ourselves, our own psychological make-up. The more we learn about the physical world, about our bodies, for example, the more points we find at which our ordinary behavior is out of accord with the facts — inapplicable, wasteful, disadvantageous, dangerous, or absurd. We find, for example, that man has been suffering from goitre for thousands of years merely for lack of a little iodine. We have still to learn how to feed ourselves satisfactorily. Similarly, the little that is yet known about the mind already shows that our ways of thinking and feeling about very many of the things with which we concern ourselves are out of accord with the facts. This is preëminently true of our ways of thinking and feeling about poetry. We think and talk in terms of states of affairs which have never existed. We attribute to ourselves and to things powers which neither we nor they possess.

Day by day, in recent years, man is getting more out of place in nature. Where he is going to he does not yet know, he has not yet decided. As a consequence he finds life more and more bewildering, more and more difficult to live coherently. Thus he turns to consider himself, his own nature. For the first step toward a reasonable

way of life is a better understanding of human nature. Fortunately the labors of psychologists have at last made this possible.

I

It has long been recognized that, if only something could be done in psychology remotely comparable to what has been achieved in physics, practical consequences might be expected even more remarkable than any that the engineer can contrive. The first positive steps in the science of the mind have been slow in coming, but already they are beginning to change man's whole outlook. The time has come to attempt some practical applications. What light does the science of the mind throw upon poetry?

Extraordinary claims have often been made for poetry, — Matthew Arnold's words quoted at the head of this essay are an example, — claims which very many people are inclined to view with astonishment or with the smile which tolerance gives to the enthusiast. Indeed, a more representative modern view would be that the future of poetry is nil. Peacock's conclusion in his *Four Ages of Poetry* finds a more general acceptance: 'A poet in our times is a semibarbarian in a civilized community. He lives in the days that are past. . . . In whatever degree poetry is cultivated, it must necessarily be to the neglect of some branch of useful study; and it is a lamentable thing to see minds, capable of better things, running to seed in the specious indolence of these empty aimless mockeries of intellectual exertion. Poetry was the mental rattle that awakened the attention of intellect in the infancy of civil society; but for the maturity of mind to make a serious business of the playthings of its childhood is as absurd as for a grown man to rub his gums with coral, and cry to be charmed asleep

by the jingle of silver bells.' And with more regret many others — Keats was among them — have thought that the inevitable effect of the advance of science would be to destroy the possibility of poetry.

What is the truth in this matter? How is our estimate of poetry going to be affected by science? And how will poetry itself be influenced? The extreme importance which has in the past been assigned to poetry is a fact which must be accounted for whether we conclude that it was rightly assigned or not, and whether we consider that poetry will continue to be held in such esteem or not. It indicates that the case for poetry, whether right or wrong, is one which turns on important issues. We shall not have dealt adequately with it unless we have raised questions of great importance.

Very much toil has gone to the endeavor to explain the high place of poetry in human affairs, with, on the whole, few satisfactory or convincing results. This is not surprising. For in order to show how poetry is important it is first necessary to discover to some extent what it is. Until recently this preliminary task could be only very incompletely carried out. The psychology of instinct and emotion was too little advanced, and, moreover, the wild speculations natural in prescientific inquiry definitely stood in the way. Neither the professional psychologist, whose interest in poetry is frequently not intense, nor the man of letters, who as a rule has no adequate ideas of the mind as a whole, has been equipped for the investigation. Both a passionate knowledge of poetry and a dispassionate capacity for psychological analysis are required if it is to be satisfactorily prosecuted.

It will be best to begin by asking 'What kind of thing, in the widest sense, is poetry?' When we have

answered this we shall be ready to ask 'How can we use and misuse it?' and 'What reasons are there for thinking it valuable?'

Let us take an experience, ten minutes of a person's life, and describe it in broad outline. It is now possible to indicate its general structure, to point out what is important in it, what trivial and accessory, which features depend upon which, how it has arisen, and how it is probably going to influence his future experience. There are, of course, plenty of gaps in this description; none the less it *is* at last possible to understand in general how the mind works in an experience and what sort of stream of events the experience is.

A poem — let us say Wordsworth's 'Westminster Bridge' sonnet — is such an experience; it is the experience the right kind of reader has when he peruses the verses. And the first step to an understanding of the place and future of poetry in human affairs is to see what the general structure of such an experience is. Let us begin by reading it very slowly, preferably aloud, giving every syllable time to make its full effect upon us. And let us read it experimentally, repeating it, varying our tone of voice until we are satisfied that we have caught its rhythm as well as we are able and, whether our reading is such as to please other people or not, we ourselves at least are clear as to how it should 'go.'

Earth has not anything to show more fair:
Dull would he be of soul who could pass by
A sight so touching in its majesty:
This City now doth like a garment wear
The beauty of the morning: silent, bare,
Ships, towers, domes, theatres, and temples lie
Open unto the fields, and to the sky —
All bright and glittering in the smokeless air.
Never did sun more beautifully steep
In his first splendour valley, rock, or hill;
Ne'er saw I, never felt, a calm so deep!
The river glideth at his own sweet will:
Dear God! the very houses seem asleep;
And all that mighty heart is lying still!

We may best make our analysis of the experience that arises through reading these lines from the surface inward, to speak metaphorically. The surface is the impression of the printed words on the retina. This sets up an agitation which we must follow as it goes deeper and deeper.

The first things to occur — if they do not, the rest of the experience will be gravely inadequate — are the sound of the word 'in the mind's ear' and the feel of the word imaginarily spoken. These together give the full body, as it were, to the words, and it is with the full bodies of words that the poet works, not with their printed signs. But many people lose nearly everything in poetry through these indispensable parts escaping them.

Next arise various pictures 'in the mind's eye' — not of words, but of things for which the words stand; perhaps of ships, perhaps of hills; and together with them, it may be, other images of various sorts. Images of what it feels like to stand leaning on the parapet of Westminster Bridge. Perhaps that odd thing, an image of 'silence.' But, unlike the image-bodies of the words themselves, these other images of things are not vitally important. Those who have them may very well think them indispensable, and for them they may be necessary; but other people may not require them at all. This is a point at which differences between individual minds are very marked.

Thence onward the agitation which is the experience divides, though its two streams have innumerable interconnections and affect one another intimately.

One branch we will call the intellectual stream, the other the instinctive or emotional stream.

The intellectual stream is fairly easy to follow; it follows itself, so to speak; but it is the less important of the two. In poetry it matters only as a means, as

directing and exciting the instinctive emotional stream. It is made up of thoughts, which are not static little entities that bob up into consciousness and down again out of it, but fluent happenings, events, which reflect or point to the things the thoughts are 'of.' Exactly how they do this is a matter which is still much disputed.

This pointing to or reflecting things is all that thoughts do. It is the instinctive stream which deals with the things that thoughts reflect or point to.

Some people who read verse — they do not often read much of it — are so constituted that very little more happens than this intellectual stream of thoughts. It is perhaps superfluous to point out that they miss the real poem. To exaggerate this part of the experience, and give it too much importance on its own account, is a notable current tendency and for many people explains why they do not read poetry.

The other branch, the instinctive stream, is what really matters; from the instincts all the energy of the whole agitation comes. The thinking which goes on is somewhat like the play of an ingenious and invaluable 'governor,' run by, but controlling, the main machine. Every experience is essentially some instinct or group of instincts working itself out.

An instinct is an impulse, ultimately an impulse to *do* something of a characteristic kind, set off by a characteristic situation. Normally what the impulse does is something which meets the needs of the situation.

In man, as in the animals, the main kinds of primary impulses which drive all the activities of the mind seem to number about a dozen. Each of these kinds is an instinct. The protective (or parental), the combative, the submissive, the self-assertive, the acquisitive, the constructive, the food-seeking, and the gregarious instincts, and those of

sex, of escape, of curiosity, and of repulsion (or disgust) — such is the most generally accepted list, that of Professor McDougall. It may seem a far cry from any interplay of these to the impulses which make up 'Westminster Bridge,' but these primary drives have, as it were, long been multiplying among themselves. Their offspring show nowadays an amazing variety. None the less they seem still to be entirely dependent upon their grandparents. Any force which the derived activity possesses comes to it from these primary drives and may, so to speak, at any moment be turned off at the main. The derivative impulses, highly specialized things that they are, — the impulse to solve crossword puzzles or to throw stones through the windowpanes of empty houses, — are ways in which the great primary drives work themselves out. They are not independent activities, and when the instincts find other means of satisfaction these derivative activities lose their force and cease.

We must picture, then, the main stream of every experience as the play of these disguised and transferred instincts. We are reading the poem in the first place only because we are in some way interested in doing so, only because some instinct is attempting to satisfy itself thereby. And whatever happens as we read happens only for a similar reason. We understand the words (the intellectual branch of the stream goes on its way successfully) only because an instinct — it may be merely curiosity — is acting through that means, and the rest of the experience is equally but more evidently instinctive adaptation working itself out.

The rest of the experience is made up of emotions and attitudes. Emotions are what the instinctive reaction, with its reverberation in bodily changes, feels like. Attitudes are the impulses toward one kind of behavior or another

which are set ready by the instinct. They are, as it were, the outward-going part of the instinct. Sometimes, as here in 'Westminster Bridge,' they are very easily overlooked. But consider a simpler case — a fit of laughter which it is absolutely essential to conceal, in church or during a solemn interview, for example. You contrive not to laugh; but there is no doubt about the activity of the impulses in their restricted form. The much more subtle and elaborate impulses which a poem excites are not different in principle. They do not show themselves as a rule, they do not come out into the open, largely because they are so complex. When they have adjusted themselves to one another and become organized into a coherent whole, the instincts which are their driving forces are satisfied. In a fully developed man a state of readiness for action will take the place of action when the full appropriate situation for action is not present. The essential peculiarity of poetry, as of all the arts, is that the full appropriate situation is *not* present. It is an actor we are seeing upon the stage, not Hamlet. So imaginative readiness for action takes the place of actual behavior.

II

This is the main plan, then, of the experience. Signs on the retina, taken up by sets of instinctive needs (remember how many other impressions all day long remain entirely unnoticed because they do not lend themselves to instinctive response); thence an elaborate agitation of impulses, one branch of which is thoughts of what the words mean, the other an emotional response leading to the development of attitudes, — preparations, that is, for actions which may or may not take place, — the two branches being in intimate connection.

We must look now a little more closely at these connections. It may seem odd that we do not more definitely make the thoughts the rulers and causes of the rest of the response. To do just this has been, in fact, the grand error of traditional psychology. Man prefers to stress the features which distinguish him from monkey, and chief among these are his intellectual capacities. Important though they are, he has given them a rank to which they are not entitled. Intellect is an adjunct to the instincts, a means by which they operate more successfully. Man is not in any sense primarily an intelligence; he is a system of instincts. Intelligence helps man, but does not run him.

Partly through this natural mistake, and partly because intellectual operations are so much easier to study, the whole traditional analysis of the working of the mind has been turned upside down. It is largely as a remedy for the difficulties which this mistake involves that poetry may have so much importance in the future. But let us look again more closely at the poetic experience.

In the first place, why is it essential in reading poetry to give the words their full imagined sound and body? What is meant by saying that the poet works with this sound and body? The answer is that even before the words have been intellectually understood, and the thoughts they occasion formed and followed, the movement and sound of the words are playing deeply and intimately upon the instincts. How this happens is a matter which has yet to be successfully investigated, but that it happens no sensitive reader of poetry doubts. A good deal of poetry and even some great poetry exists — for example, some of Shakespeare's Songs and, in a different way, much of the best of Swinburne — in which the sense of the words can be almost entirely missed

or neglected without loss. Never, perhaps, entirely without effort, however; though sometimes, as in Meredith, with advantage. But the plain fact that the relative importance of grasping the sense of the words may vary — compare Browning's 'Before' with his 'After' — is enough for our purpose.

In nearly all poetry the sound and feel of the words, what is often called the form of the poem in opposition to its content, get to work first, and the sense in which the words are taken is subtly influenced by this fact. Most words are ambiguous as regards their plain sense, especially in poetry. We can take them as we please, in a variety of senses. The sense we are pleased to choose is the one which most suits the impulses already stirred through the form of the verse. The same thing can be noticed in conversation. Not the strict logical sense of what is said, but the tone of voice and the occasion are the primary factors by which we interpret. Science, it is worth noting, endeavors with increasing success to bar out these factors. We believe a scientist because he can substantiate his remarks, not because he is eloquent or forcible in his enunciation. In fact we distrust him when he seems to be influencing us by his manner.

In its use of words poetry is just the reverse of science. Very definite thoughts do occur, but not because the words are so chosen as logically to bar out all possibilities but one. No. But because the manner, the tone of voice, the cadence, and the rhythm play upon our instincts and make *them* pick out from among an indefinite number of possibilities the precise particular thought which they need. This is why poetical descriptions often seem so much more accurate than prose descriptions. Language logically and scientifically used cannot describe a landscape or a face. To do so it would need

a prodigious apparatus of names for shades and nuances, for precise particular qualities. These names do not exist, so other means have to be used. The poet — even when, like Ruskin or De Quincey, he writes in prose — makes the reader pick out the precise particular sense required from an indefinite number of possible senses which a word, phrase, or sentence may carry. The means by which he does this are many and varied. Some of them have been mentioned above, but the way in which he uses them is the poet's own secret, something which cannot be taught. He knows how to do it, but he does not himself know how it is done.

Misunderstanding and underestimation of poetry are mainly due to overestimation of the thought in it. We can see still more clearly that thought is not the prime factor if we consider for a moment not the experience of the reader but that of the poet. Why does the poet use these words and no others? Not because they stand for a series of thoughts which in themselves are what he is concerned to communicate. He is not writing as a scientist. But because the instincts which the situation calls into play combine to bring these words, just in this form, into the poet's consciousness as a means of ordering, controlling, and consolidating the whole experience. The experience itself, the tide of impulses sweeping through the mind, is the source and the sanction of the words. They represent this experience itself, not any set of perceptions or reflections, though often to a reader who approaches the poem wrongly they will seem to be only a series of remarks about other things. But to a suitable reader the words — if they actually spring from experience and are not due to verbal habits, to the desire to be effective, to factitious excogitation, to imitation, to irrelevant contrivances, or to any other of the failings which

prevent most people from writing poetry — the words will reproduce in his mind a similar play of instincts putting him for the while into a similar situation and leading to the same response.

Why this should happen is still somewhat of a mystery. An extraordinarily intricate concourse of impulses brings the words together. Then in another mind the affair in part reverses itself, the words bring into being a similar concourse of impulses. The words which seem to be the effect of the experience, in the first instance, seem to become the cause of a similar experience in the second. A very odd thing to happen, not exactly paralleled outside communication. But this description is not quite accurate. The words, as we have seen, are not simply the effect in one case, or the cause in the other. In both cases they are the part of the experience which binds it together, which gives it a definite structure and keeps it from being a mere welter of disconnected impulses. They are the key, to borrow a useful metaphor from McDougall, for this particular combination of impulses. So regarded, it is less strange that what the poet wrote should reproduce his experience in the mind of the reader.

III

Enough, perhaps, as to the kind of thing a poem is, as to the general structure of these experiences. Let us now turn to the further questions: 'Of what use is it?' 'Why and how is it valuable?'

The first point to be made is that poetic experiences are valuable — when they are — in the same ways as any other experiences. They are to be judged by the same standards. What are these?

Extraordinarily diverse views have been held upon this point. Very naturally, since such very different ideas have been entertained as to what kind

of thing an experience is; for our opinions as to the differences between good and bad experiences depend inevitably upon what we take an experience to be. As fashions have changed in psychology, men's ethical theories have followed suit. When a created, simple, and eternal soul was the pivotal point, Good was conformity with the will of the creator, Evil was rebellion. When the associationist psychologists substituted a swarm of sensations and images for the soul, Good became pleasure and Evil became pain, and so on. A long chapter of the history of opinions has still to be written tracing these changes. Now that the mind is seen to be a hierarchy of impulses, what will for this account be the difference between Good and Evil?

It is the difference between free and wasteful organizations, between fullness and narrowness of life. For if the mind is a systematic concourse of impulses, and if experience is their play, the worth of experience is a matter of the number, force, and freedom of the impulses which make it up.

This is a first approximation. It needs qualifying and expanding if it is to become a satisfactory theory. Let us see how some of these amendments would run.

Each hour of any person's life holds out innumerable possibilities. Which of these are realized depends upon two main groups of factors: the external situation in which he is living, his surroundings, including the other people with whom he is in contact; and, secondly, his psychological make-up. The first of these, the external situation, is often given too much importance. To recognize this fact we have only to notice what very different experiences different people undergo when in closely similar situations. A situation which is dullness itself for one may be full of excitement for

another. What an individual responds to is not the whole situation, but a selection from it, and as a rule few people make the same selection. What is selected is decided by the organization of the individual's instincts.

Now let us simplify the case by supposing that nothing which happens during this hour is going to have any further consequences either in our hypothetical person's life or in anyone else's. He is going to cease to exist when the clock strikes — but for our purposes he must be imagined not to know this — and no one is to be a whit the better or worse whatever he thinks, feels, or does during the hour. What shall we say it would be best for him, if he could, to do?

We need not bother to imagine the detail of the external situation or the character of the man. We can answer our question in general terms without doing so. The man has a certain definite instinctive make-up — the result of his past history, including his heredity. There will be many things which he cannot do which another man could, and many things which he cannot do in this situation, whatever it is, which he could do in other situations. But, given this particular man in this particular situation, our question is, which of the possibilities open to him would be better than which others? How should we, as friendly observers, like to see him living?

Setting pain aside, we may perhaps agree that torpor would be the worst choice. Complete inertness, lifelessness, would be the sorriest spectacle — anticipating too nearly and unnecessarily what is to happen when the hour strikes. We can then perhaps agree, though here more resistance from preconceived ideas may be encountered, that the best choice would be the opposite of torpor — the fullest, keenest, most active, completest kind of life.

Such a life is one which brings into play as many as possible of the positive instincts. We can leave out the negative instincts. It would be a pity for our friend to be frightened or disgusted even for a minute of his precious hour.

But this is not all. It is not enough that many instincts should be awake and active. There is a more important point to be noted.

. . . The gods approve
The depth, and not the tumult, of the soul.

The instincts must come into play and remain in play with as little conflict among themselves as possible. In other words, the experience must be organized so as to give all the impulses of which it is composed the greatest possible degree of freedom.

It is in this respect that people differ most from one another. It is this which separates the happy from the mad. Far more life is wasted through muddled mental organization than through lack of opportunity. Conflicts between different impulses are the greatest evils which afflict mankind.

The best life, then, which we can wish for our friend will be one in which as much as possible of himself is engaged, as many of his impulses as possible. And this with as little conflict, as little mutual interference between different subsystems of his activities, as is possible. The more he lives and the less he thwarts himself, the better. That briefly is our answer.

There are two ways in which conflict can be avoided or overcome. By conquest and by conciliation. One or other of the contesting impulses can be suppressed, or they can come to a mutual arrangement, they can adjust themselves to one another. We owe to psychoanalysis — at present a rather undisciplined branch of psychology — a great deal of striking evidence as to the extreme difficulty of suppressing

any vigorous impulse. When it seems to be suppressed it is often found to be really as active as ever, but in some other form, generally a troublesome one. For this reason, as well as for the simpler reason that suppression is wasteful of life, conciliation is always to be preferred to conquest. People who are always winning victories over themselves might equally well be described as always enslaving themselves. Their lives become unnecessarily narrow. The minds of many saints have been like wells; they should have been like lakes or like the sea.

Unfortunately most of us, left to ourselves, have no option but to go in for extensive attempts at self-conquest. It is our only means of escape from chaos. Our impulses must have some order, some organization, or we do not live ten minutes without disaster. In the past, Tradition — a kind of Treaty of Versailles assigning frontiers and spheres of influence to the different instincts, and based chiefly upon conquest — ordered our lives in a moderately satisfactory manner. But Tradition is weakening. Moral authorities are not so well backed by beliefs as they were; their sanctions are declining in force. We are in need of something to take the place of the old order. Not in need of a new balance of power, a new arrangement of conquests, but of a League of Nations for the moral ordering of the impulses — a new order based on conciliation, not on attempted suppression.

Only the rarest individuals hitherto have achieved this new order, and never yet, perhaps, completely. But many have achieved it for a brief while, for a particular phase of experience, and many have recorded it for these phases.

It is my contention that we have these records in poetry.

But before going on to this new point

let us return for a moment to our hypothetical friend who is enjoying his last hour, and suppose this limitation removed. Instead of such an hour let us consider any hour, one which has consequences for his future and for other people. Let us consider any piece of any life. How far is our argument affected? Will our standards of good and evil be altered?

Clearly the case now is, in certain respects, different; it is much more complicated. We have to take these consequences into account. We have to regard his experience, not in itself alone, but as a piece of his life and as a probable factor in other people's situations. If we are to approve of the experience, it must not only be full of life and free from conflict, but it must be likely to lead to other experiences, both his own and those of other people, also full of life and free from conflict. And often in actual fact it has to be less full of life and more restricted than it might be in order to ensure these results. A momentary individual good has often to be sacrificed for the sake of a later or a general good. Conflicts are often necessary in order that they should not occur later. The mutual adjustment of conflicting impulses may take time, and an acute struggle may be the only way in which they learn to coöperate peacefully in the future.

But all these complications and qualifications do not disturb the conclusion we arrived at through considering the simpler case. A good experience is still one full of life, in the sense which we have explained, or, derivatively, one conducive to experiences full of life. An evil experience is one which is self-thwarting or conducive to stultifying conflicts. So far, then, all is sound and shipshape in the argument and we can go on to consider the poet.

The chief characteristic of poets is their amazing command of words. This

is not a mere matter of vocabulary, though it is significant that Shakespeare's vocabulary is the richest and most varied that any Englishman has ever used. It is not the quantity of words a writer has at his disposal, but the way in which he disposes them, that gives him his rank as a poet. His sense of how they modify one another, how their separate effects in the mind combine, how they fit into the whole response, is what matters. As a rule the poet is not conscious of the reasons why just these words and no others best serve. They fall into their place without his conscious control, and a feeling of rightness, of inevitability, is commonly his sole conscious ground for his certainty that he has ordered them aright. It would as a rule be idle to ask him why he used a particular rhythm or a particular epithet. He might give reasons, but they would probably be mere rationalizations having nothing to do with the matter. For the choice of the rhythm or the epithet was not an intellectual matter, — though it may be capable of an intellectual justification, — but was due to an instinctive impulse seeking to confirm itself, or to order itself with its fellows.

It is very important to realize how deep are the motives which govern the poet's use of words. No study of other poets which is not an impassioned study will help him. He can learn much from other poets, but only by letting them influence him deeply, not by any superficial examination of their 'style.' The motives which shape a poem spring from the root of the mind. The poet's style is the direct outcome of his instinctive organization. That amazing capacity of his for ordering speech is only a part of a more amazing capacity for ordering his experience.

This is the explanation of the fact that poetry cannot be written by cunning and study, by craft and contriv-

ance. To a superficial glance the productions of the mere scholar, steeped in the poetry of the past and animated by intense emulation and a passionate desire to place himself among the poets, will often look extraordinarily like poetry. His words may seem as subtly and delicately ordered as words can be, his epithets as happy, his transitions as daring, his simplicity as perfect. By every intellectual test he may succeed. But unless the ordering of the words sprang, not from knowledge of the technique of poetry, added to a desire to write some, but from an actual supreme ordering of experience, a closer approach to his work will betray it. Characteristically its rhythm will give it away. For rhythm is no matter of tricks with syllables, but directly reflects personality. It is not separable from the words to which it belongs. Moving rhythm in poetry arises only from genuinely stirred impulses, and is a more subtle index than any other to the order of the instincts.

Poetry, in other words, cannot be imitated; it cannot be faked so as to deceive the only test that ought ever to be applied. It is, unfortunately, true that this test is often very difficult to apply. And it is sometimes hard to know whether the test has or has not been applied. Only genuine poetry will give to the reader who approaches it in the proper manner a response which is as passionate, noble, and serene as the experience of the poet, the master of speech because he is the master of experience itself. But it is easy to read carelessly and shallowly, and easy to mistake for the response something which does not belong to it at all. By careless reading we miss what is in the poem. And in some states of mind — for example, when intoxicated — the silliest doggerel may seem sublime. What happens is not due to the doggerel, but to the drink.

MISSISSIPPI MELODIES

BY VIRGINIA MOORE

I. LI'L BLACK BLOW-BALL

Li'l black blow-ball, res' an' res',
While de win' am wooin' de watah-cress;
You's dim as de watah,
Mah dark li'l daughtah,
Wid a shadder fo' yo' haid an' breas'.

Sof' li'l blow-ball, bent an' bowed,
Kiver yo' haid wid a big black cloud,
An' sleep fo' an hour,
Mah fine li'l flowah,
A-settin' on yo' stem so proud.

De win' rise up an' de dark fall t'rough
T' smudge up de sky what use t' be blue —
Sweet li'l niggah,
De win' kain't figgah
Which am de night an' which am you.

Li'l black blow-ball, de melons know
Yo' bare li'l foots am gwine-a go
Runnin' from sorrow —
But dat's termorrow!
Li'l black blow-ball, blow . . . an' blow . . .

II. DE SHANTY WHAT GROWED ON A STEM

BUTTON. See dat shanty? Chimney? Thatch?

Pea-ladder? Yesta'day a brawl

Ob daisies in a yellah patch

Kivered de hill — an' dat was all!

BLISTER. Ah sees it plain uz noon. What make

You shivah lak a pollywog pool?

Jus' ovahnight a shack don' break

Outa de groun' — Ah ain' no fool!

BUTTON. But Blistah, yesta'day Ah scour'

Dat daisy hill. No shack in sight!

Ef daisies bloom inside a hour,

Why kain't a shanty ovahnight?

BLISTER. De oxeve daisy neber sprout

Till rain-clouds give a yappin' yawn —

An' ef dat shanty flowah'd out,

Den whar de stem it flowah'd on?

BUTTON. Mebbe it broke. No, ef it broke

De shanty would 'a' lop' an' fell

Sideways. Was dat a frog what croak'?

Sweet Jesus, what's dat ghostie smell?

BLISTER. No stem — no stem — no stem t' grow —

An' yesta'day a daisy brawl.

BUTTON. Let fly yo' heels! Dat shanty's no

Shanty at all — shanty at all!

MISSISSIPPI MELODIES

III. COTTON CHORUS

NIGGAH standin', niggah squattin',
Flirt yo' fingahs in de cotton
Boles what huddle thick;
Tag along de Aprul harrow
What wedged wobbly, deep, an' narrow —
Pick, pick, pick!

Drap no riffraff in de cotton,
Nothin' sharp an' nothin' rotten
Lak a leaf o' stick;
Swang it on yo' gian' shouldah
'Foh de racin' sun am oldah —
Pick, pick, pick!

All de cankahs in de cotton,
Wo'ms an' weevils am fohgotten
An' fohgotten quick,
When de bended backs an' fingahs
Ob a hund'ud blackbird singahs
Pick, pick, pick!

Gunny sacks ob cleanes' cotton,
Lak a goss'mah cloud a-clottin',
Once was flowah-sick —
Pink an' pale an' vi'let gloomin',
Color ob a 'latto 'ooman —
Pick, pick, pick!

Augus' sun am pow'ful hot an'
Set on arguin' wid de cotton
Lak a luni-tick —
But de cool ob night am comin'
An' de dimmy stars am hummin'
Pick, pick, pick!

IV. DE RAIN MISERY

DE redwood road am muck an' mud,
An' Ah's too wooden-stiff t' beg
De Lohd t' stop dis second flood
An' smite de misery outa mah leg.

Looka heah, rain, no mo' ob yo' sass —
De yams am sof' an' de melons am slack;
Ah's too old t' munch wet grass —
Me wid de misery in mah back.

Looka heah, rain, jus' what y' mean?
You an' de Debil am pow'ful smart
A-beatin' t' uth de blossomin' bean
An' chockin' de misery in dis heart!

MINE OWN PEOPLE

BY BENJAMIN HARRISON CHAFFEE

It was by the merest chance that I fell into teaching. Possibly that is why, unfettered by pedagogic traditions and theories, I was able to throw myself unprejudiced into the life of the children and of the community, there to find adventure and happiness.

One who has lived in the madness and folly and suffering of war is likely to have a temporary antisocial reaction. I remember the longing to get far away, to be in quiet, to be independent — out of all turmoil. And so, to regain health which had suffered through gassing and exhaustion in France, I settled, after marriage, in the Sand Hill section of a Southern State. I built a bungalow by my own labor and the generous aid of a brother, and set out several thousand peach trees. We loved the farm life there. We brought many trees and shrubs from the woods to plant about the house. We knew each of our chickens by name and even by cackle. The peach trees, however, required little attention in the winter, and we thought of teaching as a means of supplementing our funds.

The near-by school was in no need of a principal; at least the need was not recognized. And so it happened that I became principal of the public school in Federal, a town of less than five hundred inhabitants, thirteen miles through the woods from the farm.

The town of Federal lies near the centre of Walter Page's land of the 'forgotten man' and the 'forgotten woman.' And his description of poverty and ignorance and overwork of

twenty years ago is, I grieve to say, almost as accurate to-day. But as I entered the town it seemed an ideal hamlet, calm, peaceful, contented, filled with unusually hospitable and kindly folk. If one would study the staunch people of Colonial America, let him go to Federal. There he will find no infusion of foreign blood or foreign ideas. The people are one hundred per cent American and one hundred years behind the times. The church has always been the centre of social life. And, while revivals are held each year, few join the church, for only children are not already members of long standing.

But one modern idea had penetrated Federal. It had come down the State highway, and had somehow persevered long after the improved road gave out. It was the idea of bonding the community to build a school. The conception fell on fertile ground, for the people, of Scotch descent, were devoted to the ideal of education, and had had a 'first-rate' academy in 'those good old days that never were,' as Page would say. The Governor of the State had attended this school; and it must have been an academy of diligent students. But I was amused to note the heavy, slave-made shutters which still clung to the adjacent church, and which had been placed there 'to keep the boys from breaking out the window-lights.'

The people voted twelve thousand dollars, unanimously, for a new school. It turned out that this was more than the value of the property would permit. Another vote was taken, this time for

eight thousand dollars, and a six-room brick building was erected.

It is amazing what poor but proud rural people can do. In four years' time they had raised their property assessments and voted twenty-five thousand more in bonds, and built eight more rooms. Six trucks carried the children in from one hundred and forty-four square miles. The school committee borrowed five thousand dollars with which to build the principal a home.

The situation indeed approached the idyllic; the school became the project of the entire community. One climax was the day of the return of the Governor. On this occasion an exposition was held, to which crowded two thousand persons. Farm exhibits filled a gymnasium, fifty by seventy feet. This the boys had built and paid for by their own labor. Even the derricks by which they erected the great scissors rafters, weighing a ton each, were of their own contriving. They had bought a moving-picture machine, and paid for that by a school cotton-patch. The four acres of school grounds were planted in native trees from the woods. The children calcimined all the inside walls of the building. The home economics and agricultural equipment was housed in rooms which contained also prizes won at the State Fair. And, as a final touch, three hundred dollars' worth of good pictures resulted from an increased respect for the beautiful. A prouder people never welcomed home their Governor.

In four years' time one comes to know such a community well. He knows all five hundred of the children and their thousand parents, where they live, their social and economic status, all the roads, the holes in the roads, many of the cars and trams along the road, and all the advertising signs.

But best of all he knows the 'bad boys.' And if he really knows them he loves them as well. Such a boy was Rafe Bomley. It was said generally among the teachers that he was a kleptomaniac. The whole Bomley family had been tarred with this, from the days of 'Baron' Bomley who, it seems, had been a belated feudal robber living in the near-by hills. Rafe was true to type, and I had several times to whip the boy for minor thefts. I thought I had to; I knew no other way. But he carried the grit of his grandfather, and I never saw him flinch or shed a tear, though the thought of striking him always aroused rebellion within me and brought tears to my own eyes. It is no small matter for a young man to be suddenly entrusted with the moral keeping of several hundred children. Due to inexperience on my part, there arose in the first year thirteen incidents in which I felt corporal punishment to be the only recourse. The next year there were but eight, the next three, then none. This does not mean that vital issues were evaded. I learned gradually to investigate the causes of misdemeanor, believing with all my heart that each child inherently craved to achieve his best self. There must therefore, I reasoned, be causes which set him against Society. And invariably such causes were to be found — hookworm or tuberculosis, parental abuse, bad associates, overwork in the fields, ignorance in the home, low intelligence, or malnutrition. For such causes, over which the children had no control, I learned that almost all of them were whipped daily at home, sometimes brutally. And I learned further that school whippings had no relation to the discipline of the school, while love, interest, understanding, and removal of disabilities seldom failed.

One day during my first year I found

the school in a suppressed furor. The boys felt that they had evidence to prove that Rafe Bomley was the culprit who, during athletic contests, had been stealing from the pockets of the clothes left in the dressing-room. On an earlier occasion the thief, being surprised in the act, had jumped from a window, leaving the print of a torn half-sole in the damp sand. Such a shoe they said Rafe wore. But fortune, intuition, or necessity had led him to use the stolen money for new shoes, and the old ones were never seen again. On this day, however, he had been stalked from the ball game and seen to break open the locked school door and tiptoe into the dressing-room. The room was dark, and when the trailer opened the door Rafe dropped a pair of trousers, moved on into the next room, and drank from the water fountain.

We decided to settle the matter by a formal trial. The entire school attended. I pitied Rafe, as he sought twelve jurors from among the indignant student body. He had no witnesses, and pleaded his own case. Pale always from emaciation, he was now livid. But I believe everyone admired his composure in defending himself. He was not guilty, he said. Herealized that it all seemed probable, but he had come for water only. He had not pushed on the door very hard, and it opened. He knew, he said, that he should not have been in the school after hours, and for that reason he had tiptoed. He was thirsty, and in hurrying through the dressing-room he might have knocked a pair of trousers off the bench. The room, he concluded, was pretty dark, and he could n't see very well; neither did he think it possible for anyone to have been sure it was not an accident.

The lawyers for the school showed more resourcefulness than I had expected. They mentioned a well which was nearer the athletic field than the

school fountain. They produced three witnesses to prove that the door of the school had been, and was at the time, locked; and they asked searching questions as to the incident in the dressing-room.

Sand Hill children are a stolid breed. I could not read the feelings behind a single expression in the room. Only one who knew them could guess the deep emotional stir going on. The jury was out only a short while. Then the foreman declared that there was in the minds of the jury some doubt of guilt on the charge of theft. The room was dark; it might possibly have been an accident. They therefore declared him not guilty of the first count, but recommended a whipping in the presence of the jury for breaking into the school. The room was terribly quiet as we filed down to the office. I steeled myself to my repugnant duty.

During the ordeal I watched Rafe's face constantly for signs of a break. But to the end there was only a clinched jaw that would have done credit to a Spartan. The palpitation of the blood vessel at the base of his neck alone betrayed the tempest within. Finally the foreman of the jury stepped forward. 'Rafe,' he said, in a friendly voice, 'you've had your medicine. You've stood a fair trial and been declared not guilty of the main charge. For the other you've been punished. If any member of this school ever twits you about this matter, you have but to tell any one of this jury, and we will handle him. The whole thing is over.' He reached out his hand to pat the younger boy on the shoulder. But something had happened. Those words of frank kindness had done what nothing else could do. They loosed the dam of emotion, and the torrent flowed unchecked. Rafe sobbed as though his heart would break.

The others left, but Rafe was unable

to control himself for several hours. My heart went out to him, and all the while I hoped for what later really happened. From that day he was a different boy. Everyone marked the change. The old Rafe with the sneak-thief look was gone, and we came to know a Rafe who could be trusted with collecting money at games and entertainments. He became a member of our champion basketball team. Once he stayed a week with us in our home. He came to be a great help to me in the school, and I cannot tell the benefit to others of his new moral influence. He even kept a list of his errors in speech, and tried to overcome them.

I was growing to know the community fairly well, for every weathered door of every unpainted house — and there were few others — was open to me. And so I came to learn that all was not so serene as I had at first thought, though there was indeed a backbone of remarkably substantial people. I learned that ignorance is not so much an evil in itself as that it keeps such bad company. Diseases of the most shocking kinds existed everywhere. And the crime, apparently, was not in having them, but in being known to have them. I shall hint at what I came to know of the families within, say, three square miles. And yet I shall only hint at the iniquity which smoulders on like a charcoal fire, without smoke or flame. It is patient, cruel, eternal. In cities such things are illumined by red lights; the orchestra of the cabaret calls attention; social workers unearth every evil; newspapers make headlines of domestic broils, and divorce proceedings are public property. In rural districts, I say, the fires burn without smoke and all appears tranquil.

But when one has become disillusioned; when he has seen pale children, boys and girls, driven with a

whip by a drunken father to work beyond their strength, the wife beaten, yet ever faithful, though thankful when her husband dies in delirium tremens; when he sees white children and colored children with the same name and the same father living in the same yard, but different houses; when he meets on the road a veritable demon driving off at top speed with a woman who has just left her bedridden husband to die uncared-for in their miserable hut; and when one sickens with the thought and cannot go on to tell of even worse things than these, then he knows the silent torture of rural ignorance. Then, if he has a heart, it cries out within him that he exert all his strength toward public education. If he is strong, he loves these people still. He understands that, beneath the apparent guilelessness, ignorance and crime lurk and are always to be found down winding, unimproved roads, no matter how picturesque, how shady, how inviting they seem.

The people, however, are not dissatisfied, for this is all that life has ever meant. But, once they see the light of truth, like Rafe they grasp at it. Rafe and I often talked over the problem, and on many points we agreed. For one thing, we saw that the children were suffering from various diseases, and also from corporal punishment. We felt that the latter was due to ignorance, and that, in any case, whippings do not reform children, since those most often and most severely whipped are always the worst.

We spoke of Terry Atwater — poor, thin, wiry boy. His body fought a brave struggle to subsist on corn bread and pork, from which he extracted energy but to feed the hookworms which by the hundreds buried their ugly heads in the soft tissues of his frail body to sap the vital fluids. The spirit seemed but to flicker from the

blaze with which his life at birth was kindled. That blaze, alas, was all the warmth the mother had, and Terry had somehow survived without a mother. His mind, never nourished, — say nothing of stimulated, — had settled into the dull apathy which is Nature's way of being kind in such cases. To this boy it was, this Terry Atwater, that I had on several occasions applied the lash. Is it any wonder that he would not study from insipid books of things and places and people utterly removed from his own life? My conscience burned as I recalled having added to his misery because he could not remember his Bible verse, 'God is love.' I began to wonder whether he knew its meaning. I resolved to see what I could do to shield the boy from further brutalities, and asked Rafe to go with me to see Terry's father.

It was with difficulty that we brought the car to position in front of the house, as the right wheels rested in so deep a gully. Terry was harrowing with a moderately well-fed team (I wish I could have used the same description for the boy). He showed no emotion or surprise as we came suddenly into view, though I knew he guessed something of our errand. The house was of the universal weathered gray. Beside it was a 'Chaney-berry' tree, beneath which were two ploughs and some other rusty implements. The only other ornament in the yard besides the tree was a small, ill-favored patch of flags. I noticed, however, a newly made bird-house, on a tall, slender pole. I learned later that Terry had made it.

Beside the house door was a tall, angular man. His face and clothes were the weathered gray of the house itself, but the grizzly face was breaking out with many unformed sores. I had expected him, on my approach, to wipe both hands on his trousers and then

extend one of them. But he remained motionless, and answered my greeting with a denial of the title 'Mr.,' substituting 'Joe.' I tried to command as much of self-assurance as he showed, and began, as though confident of sympathetic understanding, talking about Terry. I saw that I was right in assuming a friendly sympathy, but there was the same lack of understanding I had always encountered in talking with Terry. And the father always came back to the same question: 'Well, I say, why don't you larrup him?' 'I have,' I at last admitted, 'but I never seem to move him. I can't get next to him. I can't make him cry.' 'I can,' was the quick answer. 'I do, every day.' I hesitated, but risked the assertion: 'I can raise red and white welts, but I can't make him flinch.' He seemed pleased, first with Terry and then with himself, and remarked: 'I cut the blood out of him.' I knew that such practices were common in that section. The State law allows a teacher to draw blood, provided he does not bruise or break a bone. But I faltered in reply. What could I say?

I was relieved at this moment by the sudden appearance of the community doctor, the approach of whose car, so absorbed had I been, I had not noticed.

'Is someone sick?' asked the doctor.

'Well, I nearly died last Sunday, but I could n't get word to you till now. What's the matter with me? There's something on my face.'

'Smallpox,' was the calm reply. 'And you're going to have a beaut of a case. Sunday? Well, it's not too late to vaccinate the others of the family.'

'I don't believe in any of this damned vaccination stuff.'

'I know you don't. That's why you've got smallpox.'

By this time I had moved back to a distance of six or eight feet, had removed my coat, rolled up my sleeve,

and was being vaccinated for the second time that week. Mr. Atwater watched with keen interest.

'You've got it, and every member of your family is going to get it,' the doctor added.

I thought I detected a note of surprise in Mr. Atwater's voice. 'Is that all there is to it?' he asked.

'That's all. Oh, sometimes it makes a sore arm for a few weeks.'

'And that will keep a fellow from catching it?'

'Yep; every time.'

'Well,' he said, 'I want 'em all to get vaccinated.' And without turning his head, or raising his voice, the father called each member of the family by name. He seemed to know that they were all hiding behind a door, or listening through an open window. Terry was the first to show up, from behind the near corner of the house.

'Why, Terry's been vaccinated,' the doctor said.

The father laughed dryly. 'Naw, he ain't. I tol' him I'd beat the life out of him if he took it in school.'

'But I'm sure he was among them,' was the reply. 'Come, Terry, and pull up your sleeve.'

The sleeve would not pull up. The cuff caught over a swollen arm, and the shirt had to be removed. The swelling from vaccination was the worst I had ever seen.

'Had he never spoken to you of this?' the doctor asked.

'Naw; he knew better'n to.'

I thought of his hours of suffering while harrowing and in other labor. I looked reproachfully at the father, for the habit is strong in us to accuse the ignorant — who themselves, of course, suffer most for their ignorance. On his face was the first real smile I had seen there. It was one of pride. The father looked down into his son's face, and there was an instant interchange of

affectionate glances. In what primitive, ill-shaped ways do these people understand one another when we cannot? I admired Terry now more than ever, and felt something of love drawing me near him.

When the doctor — who, it chanced, was a school committeeman — had gone, and when the children had returned to their listening-posts, we came back to our former theme. But I still met the same obstacle as before. And when we had argued the old round once more, the father announced, in final accent, 'Well, all I says is, beat him. Do like I do. Cut the livin' blood out of him! I say you can't do no harm, an' you might do some good.'

I was at a loss — defeated. Then unexpectedly I heard Rafe's voice. It rang with a rush of emotion that was startling. 'I'll tell you, Joe Atwater, you're wrong! Think! Think, man! You're dead wrong! You are certain to do no good, and' — he paused, as though about to hurl a harpoon — 'you have already done a world of harm!'

I was at a loss to understand Rafe's boldness. And still more was I at a loss to comprehend the strange influence his words had upon the other man. There was a sudden, singular pallor on the man's face, which drew all the color even from the sores forming there. There was a dry gulp and a loosening of the body muscles as though from shock.

On the way home I began to understand.

The year before, Terry's brother had died. I had not heard the details until Rafe told me now. The little boy had been found in bed, sick. For two days he would say nothing, nor would he allow anyone to come near him. On the third day he was delirious, and they carried him to the hospital. There, an hour before death, he told the surgeon the trouble. His father had forbidden his climbing the 'Chaney-berry' in the

yard; he would, he said, 'beat the life out of him' if he did. The child had climbed the tree, had fallen on the plough below, and a point had entered his side. Fear had sealed his lips, and he now lay dying.

My anger kindled against the brutal father. But slowly it subsided. 'How,' I thought, 'had he been brought up? What chances, what hardships, had been his lot? What patience, what love, even, must he have exerted in caring for the motherless infant! How fine he had been to turn about and have the children vaccinated! How Terry had

returned his look of affection! How ignorance and disease were punishing him! What self-reproach had Rafe's words brought! Perhaps, though without benefit of knowledge, he could yet be a better father.'

My anger turned into a solemn resolve. I would never forsake these starving people. Education would henceforth be my religion.

Rafe was speaking in a voice that choked. 'Do you realize,' he said, 'that I was brought up in just that way? I should some day have been just such a father if it had n't been for that trial.'

THE DEBT

BY A. CECIL EDWARDS

WHEN my fat, spectacled friend, Samsam-ol-Molk, Minister of War, was arrested by the leader of a successful coup d'état, he took his misfortune serenely, as became a student of the classics and a poet. Serenely, also, because he knew that in Persia revolutions do not kill. With that assurance which springs from a perfect understanding of the precedents, he waited for the moment when the new Prime Minister would condescend to discuss terms with him.

Into the details of that subtle negotiation I will not venture now. Let it be mentioned only that to a haughty demand — accompanied by recriminations and threats — for a payment of one hundred thousand tomans my poet meekly offered ten thousand; that this offer was scorned by the new Prime Minister, who left the room in high dudgeon; that my poet smiled and

waited patiently for his return; and that at the third interview, with great good-humor on both sides, a sum of fifty thousand was agreed upon. To raise even a part of this important sum, Samsam-ol-Molk was compelled to order his grain stores to be opened. For the rest, his Zoroastrian banker, Erbab Rustem, accommodated him, at twenty-two per cent. When at length the full amount was discharged, my friend received his liberty. He at once quitted the capital for his estates near Hamadan.

It was during the years of his enforced retirement, following these events, that I met Samsam-ol-Molk. He was living in his *kaleh* at Noberan — a huge, square, mud-built fortress, set on high ground in a broad valley, thirty miles from Hamadan. There on either hand his villages lay, one green patch behind another, as far as the eye could reach.

A pleasant garden lay inside the battlements, a garden of brimming rectangular pools and straight paths flanked with poplars. At one end spread a low white-plastered house; two tall white-plastered columns supported the ceiling of its high audience-porch, which jutted out, like a stage, into the garden.

In this retreat, secluded and secure behind that immense battlemented wall, Samsam-ol-Molk held his court; dispensed justice among his rayats; gathered in his rents; arranged small, harmless corners in wheat; read his favorite Hafiz; turned, from time to time, a not too indifferent couplet, and from afar watched Tehran.

The revolution had been dead four years. I say 'dead' advisedly, because the exalted programme and alluring promises that accompanied the coup d'état had faded imperceptibly into a policy older and more familiar. That policy, ancient as the Persian State itself, time-honored, accepted of the people, is called, in Persian, 'eating money.'

The Prime Minister who had so successfully negotiated with my friend had been succeeded by another. He too, after an allotted span of four months of office, had gone, carrying off what he could. With satisfying regularity the chiefs of the great families followed each other in office; yet the keenest eye must have failed to detect any change, either for better or for worse, in the governance of Persia.

The revolution had been dead four years when, on a lambent August evening, I sat with Samsam on his verandah, watching the shadows of the poplars lengthen in the brimming pools, while he recounted to me, in his suave, musical Persian, the events of the opening of this story. Then he said: —

'You cannot understand these things. How should you understand? Affairs

with you are different. With you, honest and intelligent service is recognized and in time rewarded. But with us — with us, when a man receives an appointment his enemies begin immediately an intrigue. He knows that, though he be Governor to-day, tomorrow he may be an exile — a man without a servant. What then should he do? My friend, we should be fools if we did not eat! Look at me. I was for eight months a Minister. I was eating little — very little. You see, I like to read Hafiz — and also I have enough. Then came the coup d'état. Sardar Mo'azzam stated in his proclamation that he would begin by cleansing the departments. He began by stealing fifty thousand tomans from me! That is the way of our reformers. They eat like the others, only more.'

And then he added, blowing a filament of blue smoke upward, 'Ah yes, I had almost forgotten that fifty thousand — shall I ever get it back? Most assuredly! You ask me how? I do not know. There are ways and ways. But you must admit that the Government owes it to me. When will the Government repay that debt, I wonder?'

At that moment, as it were out of the skies, came the beginning of the answer. A barefooted servant, wearing a long, generously pleated tunic and the balloon-shaped hat of usage, sidled up to us and with both hands proffered to my friend a telegram. Samsam, having asked my permission, in that deprecating Persian way, broke the seal.

A Persian telegram, at best, exacts for its elucidation a certain inventiveness. It would seem that the mirzas of the telegraph take pride in further lengthening the long pothooks of the *shekasta* script; and they must regard dots as trifles wholly superfluous. To the eye of the unpractised, most of the letters look alike. Even Samsam, I could see, was puzzled. The telegram

was long, and he appeared to study every word. He went over it a second time, and a third. Then he turned to me.

'I ask pardon,' said he. 'A telegram from Tehran. Purposely, it is not in code, yet there are some words in it which I could not understand at first. There is news. The pot is boiling over there. May I read it? Listen:—

'To His Excellency Samsam-ol-Molk, Hamadan.— Information has reached the Government that the Pretender, Salar-i-Nizam, has induced some of the Kurdish tribes to join his standard and to march on Tehran. This miserable force will be met and destroyed before it reaches the capital; but in the meantime it is necessary that urgent steps be taken to hold up the Pretender on his line of march at Hamadan. Your Excellency's loyalty and skill in war' (Samsam beamed at me over his spectacles), 'above all, the great honor in which your name is held throughout the province of Hamadan, impel me to call upon you for this service. You are appointed Governor of Hamadan, and are instructed to raise an army of ten thousand horsemen against Salar-i-Nizam. A telegram has been dispatched to the present Governor to hand over to you his office.

MEHDI

President, Council of Ministers'

I said: 'Salar-i-Nizam again? Will that man never tire of stirring up trouble?'

'He will never tire,' said Samsam. 'He is mad. He thinks that he is greater than Napoleon or Nadir Shah. Can you believe, he sleeps only four hours at night, because he has read, in some lying history, that Napoleon did so. He will try to seize the throne, and if he succeeds he says that he will march on India to drive the English out! I have heard him talk — it is like the waters of a river. Who knows — perhaps he will arrive. These madmen —' The phrase ended in an elusive shrug.

'What are you going to do about the telegram?'

'Oh, I am going into Hamadan at

once to raise my army. But to do that,' — he looked at me again, quizzically, over his spectacles, — 'to do that, money is required.'

With an alacrity surprising in one habitually so deliberate, he ordered his carriage, climbed into it, and invited me to a seat beside him. We started on our thirty-mile drive just as the jagged white line of the Elvend ahead of us took on a hint of rose.

It was midnight when we passed the turnpike at the edge of the sleeping town. We clattered through dark, tortuous, ill-paved streets, flanked on either hand by windowless mud-walls, until we reached, beyond the town, the more open country of the foothills. There we few Ferenghis live. Samsam dropped me at my door. I heard him order his coachman to drive on to the telegraph office. I wondered whether he intended to rout out the wretched operator at that hour of the night.

The next morning when Habib, my servant, entered my room I said, knowing that he has an interest in a tea-house, where the gossips of the quarter forgather: 'Habib, is there any news this morning in the bazaar?'

'There is a news. They say that Salar-i-Nizam, with ten thousand Kurdish sows, is coming to take Hamadan. They say also that the Governor has resigned and that Samsam-ol-Molk has been appointed in his place. The Government has ordered Samsam-ol-Molk to collect twenty thousand sows to fight with Salar-i-Nizam. Samsam-ol-Molk has telegraphed to the Government that without money he cannot raise an army. He has asked for seventy thousand tomans. All this is true. The mirza of the telegraph, who is my friend, told me.'

In Persia a telegram, if it is not in code, is common property. Even code messages — sometimes.

Before noon I learned indirectly from

the National Bank — indirectly, because Finlay, the manager, is a man who takes his position seriously and tries, with varying success, to keep secret the bank's operations — that Tehran had remitted fifty thousand tomans to Samsam for the expenses of his army. Later Habib came to my room to tell me, with emotion, that the new Governor had issued a proclamation calling upon every man between the ages of eighteen and forty to enroll at the Government House. 'Up to now,' he protested, 'such a thing has not been heard of in Hamadan. Sah'b, what are your commands?'

I answered that, as I saw it, there was only one thing for him to do — to enroll; and also to bring me news of what was doing. In an hour he returned, smiling and much relieved.

'It is nothing,' said he. 'A way of getting money. I went to the Government House. There was a great commotion; the courtyard was filled with bazaar people and villagers. Two soldiers led me to a man who was sitting at the end of a long table. I knew him. It was an agent of Samsam-ol-Molk. "Ah, Habib," said he, "it is you. Well, have you seen the proclamation of the Governor? Are you ready to become a sower and fight for the King of Kings against that miscreant, Salar-i-Nizam?"'

"Nasrullah Khan," I answered, "thou knowest I am ready. My life and that of my children are a sacrifice to the Point of Adoration of the Universe. Still, what have I to do with Salar-i-Nizam? And as to becoming a sower, why, I should fall off my horse! Also, I am too old. Let me go back to my master, the Sah'b."

"True," answered Nasrullah Khan. "I had forgotten. You are one of the Sah'b's servants."

"The Head of his Servants," said I.

"It is well," answered Nasrullah Khan. "You are excused. But every-

one who is excused has to pay three tomans. You must pay three tomans."

"Why three tomans?" I asked. "Others are paying one toman."

"It is true," answered Nasrullah Khan, "but they are villagers and beggars, while you are the Head of the Servants of the Sah'b. Three tomans! It is as cheap as the water of the river."

'I gave him two tomans,' said Habib, 'and I received my paper. Here it is. Truly Samsam-ol-Molk has a cleverness. He is collecting thousands of tomans from the people, but no army. Why should he collect an army? It is the business of the Government to fight against Salar-i-Nizam. What are the Cossacks and gendarmes doing in Tehran? It is their business to fight, not his. And if he were to raise an army what kind of army would it be? A rabble without exercise, without Maxims. The Kurds of Salar-i-Nizam would eat it up! And then he would march on Tehran and seize the throne, and what would become of Samsam-ol-Molk? No, an army is not his business. What should he be doing with an army?'

What indeed? An army could accomplish nothing — except swallow up the fifty thousand tomans!

Apparently, though, Samsam was getting something together. Not everybody in the town, I found, preferred a peaceful life, minus a toman or two, to a life of glory. Yet it must be added that most of his recruits were unable to buy, like Habib, a paper of exemption.

A week later I went for an evening's ride to the top of a little hill that overlooks the plain northward and eastward of the town. Habib accompanies me on these occasions, because Safer, my groom, has never mastered the mystery of rising in the saddle, as the Fereghis do, to a trotting horse. As I rode over the brow of the hill, — where, if one

were to dig, the chances are that one would come upon the bones of a palace of Darius, — I perceived, dotted on the plain below, a matter of fifty white tents. Habib exclaimed: —

'Look, Sah'b! The army of Samsam-ol-Molk! They say in the bazaar that he has collected five thousand sowars. Pah! It is a lie. Five hundred, perhaps. And most of them are his own rayats. He pays them nothing, and each man brings his own horse. Do you see where he has pitched his camp? If Salar-i-Nizam comes to Hamadan, he will attack from the other side. Yet Samsam has made his camp on this side! Assuredly he has some design.'

That night I was awakened from my first sleep by what sounded like the crackle of musketry. There was a lull, and afterward, for some time, the sound of desultory firing; then the rumble of a drum, growing fainter and fainter. Then silence. I went to sleep again.

In the morning, when Habib entered the room with early tea, I perceived that he was bursting with news.

'Sah'b, Salar-i-Nizam has taken Hamadan!'

'What,' cried I, jumping out of bed.

'It is nothing, Sah'b. Drink your tea in peace. The Kurds rode in at midnight. They fired a few shots, but there was no opposition. Salar-i-Nizam has occupied the Government House.'

'Has there been any looting?'

'None at all, Sah'b. Early this morning Salar-i-Nizam issued a proclamation to the townspeople, telling them that he had come to protect them from the robber government in Tehran, and threatening to shoot anyone who was caught looting. His Kurds will not be happy at that! But he knows them. He knows that they are good fighters until their saddles are heavy with loot. Then they begin to look behind them toward their villages and to forget the enemy. Until the battle for Tehran is

won, he will forbid them. But afterward? Assuredly he will give them the Tehran bazaar for two days as a reward. Alas for the poor shopkeepers!'

'Where is Samsam-ol-Molk?'

'Where would he be, Sah'b? The camp in the plain has disappeared. Did I not say that he had a design? Without a doubt he has retired with his five hundred sowars to his kaleh at Noberan. There he will wait to see which way the tree will fall. Truly, Samsam-ol-Molk has a cleverness!'

Later, I took a walk into the town. Habib, in his blue livery with gold buttons and his balloon-hat, followed me at a respectful distance. We found the bazaar thronged with hundreds of tough, undisciplined mountaineers, urging their wiry horses with strange cries through the anxious crowds of townspeople. The Kurdish troopers wore black trousers, each trouser leg as wide at the bottom as a woman's skirt, and long black coats, with sashes of gay colors and of enormous length wound around their waists. And every man wore the peculiar headdress of the Kurd, a black balloon-hat like Habib's but flatter at the top, with one or more checked handkerchiefs tied loosely around it.

Salar's army rested for two days in Hamadan. Then, as suddenly as it had come, it disappeared. One had a vision of those ten thousand wild horsemen riding to the capital across two hundred miles of dry, desolate, sun-baked plain, searching out and devouring on their way every little store of grain or fodder which the wretched peasants had laid up against the long, cruel winter. I took out the map and reckoned, day by day, how far they must have gone on their journey. I calculated when the battle, if there was to be a battle, must engage. From Tehran there could be no news, because Salar had cut the wires; but I knew that certain of my friends

had arranged to be kept informed, by runners, of the progress of events.

Then, on a sudden, the news passed from mouth to mouth that Salar's army had been beaten by the Government forces. The Kurds, it seemed, had been mowed down by machine-guns directed by a German artillery officer. Back over the road which they had taken they were in full retreat, with Persian Cossacks and Armenian cavalry at their heels. In three days, I thought, they would be in Hamadan again — a broken, undisciplined rabble, greedy for plunder. There was time for all, Ferenghi and Persian alike, to barricade our houses, to look to our firearms, and to conceal whatever we had of value that could be carried away on a Kurdish saddle-bow.

We might have spared ourselves the trouble. On the third day, the advance guard of the retreat — horse and man hungry, weary, dejected — straggled into Hamadan. All the afternoon and far into the night the troopers streamed in, too dispirited, too homesick, too exhausted to think of loot. All they wanted was bread, and that the townspeople, breathing more freely, gave them. Knowing that their pursuers were not far behind, they made no halt, but, mounting again their jaded horses, the disillusioned children of the mountains rode out of the city, westward, toward their homes in Kurdistan.

When the last straggler was gone, I too mounted my horse, and rode in the opposite direction to meet the first of the pursuit. I had not far to ride; very soon I saw, through a cloud of dust, the fur caps of the Armenian cavalry. At their head rode a small, swarthy Armenian whom I remembered; and by his side, sitting easily a familiar gray

horse, rode a fat, spectacled Persian gentleman, clad in a black coat buttoned to the neck, with a black cap, shaped like a pill-box, set jauntily upon his head. It was my friend. He seemed to be taking a hand in the pursuit.

As we rode side by side toward the town, I prevailed upon him to rest a moment from his wars and discuss with me a bottle of Shirazi on my verandah. When we had dismounted, and Habib had filled the glasses, I said: —

'Everything, then, has turned out all right?'

'Yes,' he replied complacently, fanning himself with his handkerchief. 'As I anticipated, the *mitrailleuses* *Maximes* of that German officer of artillery made it unnecessary that my invincible army should participate in the battle. Like many famous generals of history,' he beamed at me over his spectacles, 'I arrived when the mists of doubt had been dispersed by the noonday of certainty. I was in time to take part in the pursuit.'

'And that little debt of fifty thousand has been repaid?' I ventured.

'Yes,' answered Samsam with a sigh. 'It has been repaid — at last. But with what a trouble, my friend! With what a headache! There was a small account for interest too — interest for four years. However,' he added, deprecatingly, 'I will let that pass. Between ourselves, Salar-i-Nizam has paid it. Three weeks ago, before he entered Hamadan, he sent me a little present — to assist me in making up my mind! Good-bye, my dear friend!'

He climbed into the saddle. Gracefully he waved a fine Persian hand to me, as his gray curveted down my avenue of poplars.

THE PHILOSOPHY OF GROWTH

BY CLIFFORD H. FARR

I

GROWTH is a theme in which all are interested. Whether in agriculture or education, industry or politics, rate of growth is the criterion of health, vigor, and success. Growth is, indeed, our chief index of virility. Animals grow. Plants grow. Crystals grow. Ideas grow. This essay has grown. Valleys grow. They have youth, maturity, and old age. Towns grow. We are glad if our business grows. If growth, then, is a general principle of existence, especially of life and human affairs, there must be a philosophy of growth—if not, indeed, *the* philosophy of growth.

Growth is primarily a biological concept. Its meaning has been applied to social and metaphysical matters largely as a borrowed method of interpretation. Perhaps we may best elucidate our philosophy of growth by inquiring first into the biological connotations of the term.

When referring to living things, growth means more than simply increase in size. The cactus growing in the desert becomes larger during each day and diminishes in volume every night. The diurnal increment that compensates for the nocturnal shrinkage is not growth, but merely swelling. The stomata—breathing-pores—are open during the night, permitting the plant to lose water by vaporization more rapidly than it is absorbed. During the daytime they are closed, and the roots take in more water than evap-

orates from the aerial parts; hence the cactus swells.

And so with a college or university—the fact that it may be getting bigger buildings, bigger grounds, bigger classes, or even bigger professors, does not necessarily mean that it is growing. It may be only swelling; and the hour of shrinkage may not be remote. Enlargement alone is not growth.

Growth for the biologist includes not only cell-enlargement but cell-division as well; that is, in growth there is a multiplication of the units of structure in addition to an increase in volume. The woolen mill has not grown by the continued enlargement of the spinning-wheel and loom to gigantic proportions, but rather by increase in the number of spindles and shuttles and carding-points, the units of which the mill is composed. Now, instead of one spindle on a spinning-wheel, we have a machine with hundreds of spindles operating simultaneously; instead of a hand carding-iron, there is a mechanism which cards the wool in great quantities. And so with a university, growth involves, not simply bigger classes, but more classes; not simply bigger departments, but more departments; not bigger athletes, but more students.

And yet even the rapid increase in the registration at our universities does not necessarily mean that they are growing. When a plant grows, its cells

not only enlarge and divide, but they differentiate as well: their walls become thicker, or impregnated with some special substance; new internal cell-organs may be developed, such as plastids or vacuoles; the cell may change its shape; or its chemical composition may be distinctly altered. As the result of one or more of these changes, the cell becomes fitted for some special function in the plant—for instance, conduction, storage, strengthening, protection, food-manufacture. Likewise in the animal during growth the primary embryonal cells differentiate into muscle fibres, nerve cells, cartilage, and so on. Differentiation is as fundamental a phase of growth in higher organisms as is cell-enlargement or cell-division. If we have only these latter two occurring in multicellular beings without an accompanying differentiation, we have cancer, and not normal development. While we apply the term 'growth' to the spread of a cancer, it is in a sense a misnomer; for the cancer is headed straight for destruction, and has no measure of success as a goal of its existence. True growth in the higher plants and animals must involve differentiation.

Nevertheless, the growth of primitive organisms consists solely of increase in size and number of cells. They are entirely devoid of cellular differentiation. Each single isolated cell performs all of the functions of an entire organism. But in the course of organic evolution these primitive cells became associated together into clusters, colonies, and then simple multicellular units. Here, then, came the opportunity for specialization,—if not, indeed, the necessity for it,—and differentiation came to be an essential accompaniment of growth.

Just so, in the evolution of human society, the family of the pioneer per-

formed all the functions necessary for life. They raised their own cotton or wool, spun it into yarn, and wove their cloth; they produced their own food, hewed their own timber, collected their own herbs, taught their own children, and even said their own prayers. They were undifferentiated human beings. But with the advent of modern civilization we find specialization: the physician, the surgeon, the lawyer, the baker, and the crossword-puzzle maker.

Growth in industry is not simply expansion and duplication; it also involves specialization. It consists in a man learning how to run just one machine, to put just one bolt in the flivver. We are told that three generations are required to produce an expert weaver of the golden tapestries of Europe.

In the early days of a certain American university one man taught all of the natural history that was given. Then he secured an assistant to give instruction in plants, while he himself specialized on animals. Later he retained another student to teach about living animals, while he concerned himself with those of past ages. And so the departments of geology, zoölogy, and botany had their origin. To-day the last-named is represented by a plant-morphologist, a plant-ecologist, a plant-physiologist, and a plant-pathologist. A similar development took place in all our large institutions of higher education. Such is the growth of learning.

But the benefits of differentiation are not unaccompanied by its penalties. The law of compensation holds here as elsewhere. The cell of the *Amaba* or the *Chroococcus* divides and forms cells that are, as far as we can tell, exactly like itself. It never changes. If adverse conditions arise it simply rests until conditions are again favorable. It

knows no natural death. Death can come to it only by accident, by extreme temperatures, chemicals, grinding, and so on. When, however, a cell becomes differentiated, as is the case with most cells of the higher plants and animals, it sooner or later loses its ability to divide again. It can no longer form more cells; its existence is therefore limited. It must sooner or later cease to exist as a cell. Such cessation of existence is death, and the approach to such cessation is senescence.

Our forefathers devoted much attention to the question of avoiding death: that is, of immortality. Religion was concerned primarily with holding out hopes of an after life. To-day we are giving relatively little thought to that old quest. Our churches are more concerned with rectifying the present life than with grappling for a future life. Even scientifically we have turned our attention toward postponing old age.

II

The growth period of an organism may be divided into three parts: juvenescence, maturity, and senescence. Senility is the ivory age, white with fixity and inflexibility. Maturity is the golden age, bright with deeds, hopes, and opportunities. Youth is the uranium age, emitting radioactive emanations that electrify the ambient medium. Juvenescence is a period of acceleration; maturity is a period of steady progress; and senescence is characterized by retardation.

Expressed geometrically, growth describes an S-shaped curve, the S being loose with its middle portion inclined slightly forward and not backward. The lower left portion, representing youth, is hyperbolic, becoming more and more abrupt as it approaches the vertex, at which it straightens out into the ascending line of maturity.

Youth is the plastic age. During it the cells that are on their way toward specialization may, if conditions become altered, dedifferentiate, becoming embryonal again; and then they can start off on a new line of differentiation. If, in mowing, a young ragweed is decapitated, its parenchymal cells dedifferentiate into meristematic cells again; and these set about forming a new top by redifferentiation into all the types of cells normally occurring therein. This later process we call regeneration. But, if the ragweed had been a little older, dedifferentiation, and hence regeneration, would have been impossible, for maturity would already have set in. The egg of a frog normally divides into two cells, each of which respectively gives rise to different tissues of the adult amphibian. But if we shake apart these two blastomeres each will give rise to a distinct frog; for the cells are still in their period of juvenescence, and have the ability to return to their original state and start development over again along new lines.

Dedifferentiation and regeneration are quite as characteristic of juvenescence in the psychological, moral, and social realms as in the physiological. On one day the child plays that he is a doctor, on the next that he is the driver of a grocery wagon. He can dedifferentiate and regenerate with great rapidity. We call this 'imitation.' As he enters upon youth these processes take place more slowly, and hence are fewer. He thinks one week, or one month, that he will study to be a preacher, and the next he is certain of becoming a football hero. We say that he is 'establishing his ideals.' When he goes to college it may take him a year or more to change his plans for life. Finally he finds himself at an age when dedifferentiation is no longer possible. Regardless of economic pressure or

even of his own pleasure or pain, he is unable to make himself over. He has reached maturity. Morally he has experienced a similar change in flexibility. In Methodist terms, youth is the logical time for conversion. It is the opportunity which nature affords for adjustment to a changing world, for trial and error — or rather, for trial, error, retrial, and success. During the war the aniline-dye works of Germany readily dedifferentiated and were regenerated into munition plants. But our steel-ship building-yards had specialized too far; we could not make them over for the construction of wooden ships. They had entered upon maturity; and maturity is a period of forward movement and not of modification.

Personally, the period of maturity is the one which we all desire to extend as much as possible. We wish to reach it as early as we can, and to prolong it while life lasts. We are glad if we are told that our boy with a biologic age of five has a mental age of nine. We are sad if told that we ourselves, with a biologic age of fifty, have a mental age of ninety. As to how this latter may successfully be avoided, I know of no better plan than to study the personalities of men who have been thus successful.

But how shall we know when we pass from the age of maturity into that of senility? William James, in urging his students to diligence, told them that, if they kept at their studies, some fine morning they would wake up and find themselves educated. Professor James meant this to apply to the dawn of maturity. It has seemed to me far more applicable to the cessation of maturity and the dawn of senility.

I know some botanists — a very few — who do not care to frequent the library, for fear someone may find them reading something that they should

already know; who do not enjoy going into the field with their students, for fear someone may bring them a plant that they cannot name; who avoid the laboratory for fear they may see some experiment that they cannot explain. Nor are such expressions of senility confined entirely to botanists. There are physicians who pose as knowing everything in the medical literature about your case, preachers who never pick up the *Atlantic Monthly*, and farmers who never read the *Agricultural Bulletins*. Such men have awakened and found themselves fearfully and phobiously 'educated'; in fact, they are already far along in the solid ivory stage of senility. But those botanists who spend their days in the field, or their nights in the laboratory, or are reading in the library when they might be playing golf, are still sound asleep in the golden oblivion of maturity. May they sleep peacefully, and may morning never come!

Senescence is not a second childhood. It is the reverse rather than the repetition of juvenescence. Senescence describes a receding hyperbolic curve, setting in quickly, but advancing at a slower and slower rate until it merges imperceptibly into death.

Death is not the sudden-end point that we have too often thought it to be. It is rather a gradual process of transition. Hundreds of people every day lose consciousness, only to be revived again. The loss of consciousness is by no means a criterion of death; for respiration still continues. Consciousness may vanish and breathing cease, yet many drowned persons are thereafter resuscitated; for heart action may still be going on, and death has not occurred. But even the stopping of the heartbeat is no longer to be regarded as the absolute index of death; for science has found a way to stimulate that into action again, if there are no

organic obstacles. Even after the heart is forever still the cells of the body remain alive, some of them for many days; and they may be kept alive in a cool sterile place for even months or years. Osterhout has found, by the use of technical chemical and electrical tests, that cell death is, likewise, by no means sudden. It too is a gradual transition from reversible to irreversible reactions. Death is thus simply a projection of senility, and not its termination.

The physiology of senility is one of the most potent questions in biology to-day. Microorganisms are found to grow at a slower and slower rate if left on the same nutrient media. If removed to other media of the same nutrient composition, they resume rapid cell-division. The old media had become stale with the waste products of their metabolism. Metchnikoff used this idea as a basis for his theory of senility in humans. He believed that by proper diet the waste products of our bodies could be removed, and maturity thus be prolonged indefinitely. But Metchnikoff and his theory have now passed on. DeVries early pointed out a decrease in acidity of the cell sap with advancing age; and Walter claims that a reduction in the water content of the tissues occurs, which accounts for the shriveled appearance of aged people, also noticeable in senile individuals of many types of plants and animals. Robertson regards senescence as the inevitable result of the law of mass action. The rate of a reaction and its direction are determined by the ratio of the materials available for consumption to the products of the transformation. In juvenescence the materials far exceed the products; in senescence the products have accumulated until in many places within the organism the direction of the reactions is reversed. The

net result is thus a retardation of the chemical changes which support life. Russo and Lepeschkin have developed the theory that is perhaps most generally accepted by biologists at the present time, as to the fundamental basis of senility. They hold that there is a gradual transformation of the living substance of higher organisms during the life-span of an individual, from a liquid state to that of a gel. Primitive unicellular organisms have their living substance permanently in a state of fluidity; they therefore know no senescence. The embryonal cells of higher organisms are likewise in this state, but during juvenescence they become more and more viscid; during maturity their protoplasm becomes still more jelly-like; and in senility it takes on the firmness of a gel, which later merges into the crystallinity of death. This conclusion is corroborated by the findings of Haberlandt, which reveal that the otoliths in the organs of equilibrium of the ear, and the statoliths in the organs of equilibrium of the root, settle through the liquid in these structures at a slower and slower rate as age advances, indicating an increase in its viscosity. The vulgar expression 'hard-boiled' is perhaps more apropos than has in the past ordinarily been admitted.

III

Sexual reproduction is nature's method of conquering old age. In the higher plants and animals a few cells are set aside for this purpose. In the past we have been in the habit of thinking of these sex cells as persisting in the adult organism in an undifferentiated condition, like the meristematic cells in the bud of a tree or shrub. It may be, however, that they are just as highly differentiated and have reached the same stage of senescence as have the muscle fibres or

sieve tubes. But if so they have the ability, upon fusion, to return to the undifferentiated state and begin juvenescence once more.

Many organisms have the ability to produce new generations without resort to sexuality. But it may very well be that such methods of reproduction are only temporary expedients. It is the general impression among horticulturists that, if the potato is propagated vegetatively for many generations, the strain will degenerate. Periodic sexual reproduction reestablishes virility. This perhaps may more than any other fact explain the prevalence and persistence of sexuality among higher organisms. It is accomplished at great expense of time in the pine trees, requiring a number of years. It is carried on at great expense of substance and energy, involving the construction of elaborate sex-organs of two distinct types, male and female. Furthermore, it involves great hazards, necessitating the production of a multiplicity of sex cells in order that two of them, unlike each other, may eventually get together. In the liverworts, for instance, a naked sperm must swim for a relatively great distance through external water in order that it shall reach the egg, dependent for the most part upon fortuity to give it direction. For all this price there must be some satisfactory recompense, else the organisms that have paid it would have lost out as helpless competitors in the struggle for existence. Its advantage seems to lie in the fact that it returns some cells, at least, to the state of juvenescence, and thereby conquers the otherwise unavoidable consequences of differentiation — namely, senility and death.

Temporary substitutes for sexual reproduction may be found in parthenogenesis, vasectomy, or grafting; but it may be questioned whether they will

stand the test of time. Benedict finds that the relative vein-tissue of grape leaves becomes greater and greater as the age of the vine advances, regardless of whether it remains on the same root system or has been grafted repeatedly to fresh stocks. Eventually the leaves become inefficient, due to the reduction in the extent of the manufacturing area; and the vine would become extinct, were it not for the production of seeds by sexual cells.

IV

But senescence is not the only penalty which the higher organism pays for specialization. Differentiation also means diminution in adaptive ability. The most adaptable organisms on the earth are by no means those which are most highly differentiated. On the other hand, the ones that we deign to call the lowest forms of life are in many ways the most successful. They have, in fact, lived on the earth in their present form longer than any other beings. Witness the bacteria consisting of single isolated cells or short rows of cells. Many of them are non-spore-forming, that is, they have no specialized cells even for dormancy. Yet bacteria in multitudes attack the human body — probably the most highly differentiated of organisms — and each year cause hundreds of the latter to succumb to their onslaughts. Conquer the bacteria, and you have almost eliminated the need for a medical profession.

Perhaps even more primitive than the bacteria are the blue-green alga, a group of organisms that manufacture their own food. Some of them grow during the spring in seeps on the rocky walls of abandoned quarries, living an aquatic life. Then the moisture evaporates, and they spend an aerial existence for weeks without change of

form, baked by the intense rays of a summer sun. When autumn comes they are covered with water once more. This later freezes, and they experience sub-zero temperatures without alteration. As 'red snow,' some of their relatives blow about unharmed on the frosty fields of the frozen North. Others live in pools high on the rocks along the seacoast. These are filled one day by storm-tossed waves; and then, during the clear quiet days that follow, the water slowly evaporates, leaving the residue to thicken into a brine and even to form a supersaturated solution. Still the micro-plants persist. Suddenly there comes a beating rain; the salt is for the most part dashed out of the pool, and fresh water takes its place; yet the alga goes on, unharmed by these changes in osmotic pressure.

Specialization means lack of adaptability. The undifferentiated alga on the quarry rocks adapts itself to extremes of temperature and extremes of moisture; the leaf growing on the tree near by may wither in the dry blasts of summer, and it drops with the first frost. During the war hundreds of teachers of German in our high schools found themselves out of employment. The younger of them were able to dedifferentiate and take up Spanish or French. The others had to suffer the consequences of their specialization.

V

It thus appears that enlargement, multiplicity, and specialization are not alone adequate for the highest expressions of growth. Industry does not evaluate specialization as the acme of success. It pays most in salaries, in honor, and in publicity to its executives, and not to its experts. Executives are not specialists; they are generals in the fullest sense of that

word. Administrative ability involves a smattering of knowledge of a great many things, a grasp of general principles without attention to details. It is associated with the generalized type of mind; and industry pays more for it than it does for the critical student.

Our newspapers relate *in extenso* the doings of our political generals at the various international conferences, and rarely mention even the names of the experts, whose work is quite as important. Our military generals receive a cheer from the populace wherever they go, while the designer of a submarine-detector plods along, unnoticed in the crowd. Our scientists eke out a meagre existence, compared with the captains of industry who profit by their discoveries.

What, then, is the reason that executives are more valuable than experts?

Is it not that healthy growth consists not only in differentiation, but in mutual helpful interaction as well? The executive is not better paid because he knows more than the expert, but because he is presumably able to get other people to do more than is the expert. He is able to coördinate, to compromise, to coöperate, and to get those under him to coöperate.

Growth in unicellular organisms may consist simply of cell enlargement and cell division; but as soon as we have associations of differentiated cells there is introduced a fourth feature of growth — namely, cellular interaction. The external manifestations of growth are the resultants of the mutual interactions of the cells within. The neighboring cells of a tissue press and pull each other. Some tend to elongate more rapidly than others; and the actual rate of elongation of the tissue is the net consequence of a compromise. Cells also affect each other chemically.

In extreme cases this takes the form of internal secretions, endocrine bodies, or hormones, as they are variously called, such as adrenalin, insulin, and pituitrin, which produce such marked physiological responses in human beings and in the higher animals. Quite comparable to these in behavior are the vitamins, which are constituents in food having definite physiological effect, especially upon the rate of development of the organism.

In the activity of all these special substances it is to be noted that very minute amounts produce very striking reactions. And so, in the interactions of social beings, the importance of an act is not to be judged by its own proportions, but by its consequences. It takes only the striking of a match to start a fire; only the pressing of an electric button to cause an explosion. A shake of the head or a shrug of the shoulders, by a person who is in a position to know, is but an incident; yet it may result in some worthy individual failing to receive an appointment that he would otherwise have obtained. Pettiness and personal antipathy may be small matters in themselves; nevertheless they may have consequences that eventually will upset our entire social well-being.

It is not sufficient that the highest forms of life have specialized cells; there must be specialized associations of cells. The muscle is such an association, directed toward mechanical movement; the leaf is another, directed toward food-formation. Not all of the cells of the muscle are muscle fibres; there are neurones and blood vessels as well. Not all of the cells of the leaf manufacture starch; there are protective cells, strengthening cells, and conductive cells. In the healthy growth of an organism, cellular interaction must be harmonious. And so, in the evolution of human society, we not only

have teachers, sailors, and automobile-makers, but have college towns, ports, and Detroit. Not all of the persons in a college town are students or instructors; there must be some janitors and some cooks. The modern community is largely an association of specialists working together and dominated by some common interest.

The cells of unlike organisms also interact with each other. In some cases this is an harmonious relationship, as when the alga and the fungus intermingle to form a lichen, the one supplying the food for both, while the other retains the water which both need. Symbiosis and commensalism are instances of interaction between individuals of different species with advantage to both. But not infrequently individual interaction between species constitutes parasitism. When the tubercle bacillus and the cells of the human body are brought into close proximity each attempts to destroy the other by the toxic substances which it emits. In some such relationships the cells of one organism may even devour those of the other. This is phagocytosis; and phagocytosis is the opposite of harmonious interaction.

The new internationalism must establish a symbiosis among nations, and not phagocytosis or parasitism. The great empire must not, like a phagocyte, pounce upon its weaker neighbors to devour them; neither must the smaller nation parasitically sap the substance of its more bulky brother. Constant compensating commercial intercourse, such as exists between Canada and our own country, is certain to culminate in the accomplishment of commensalism among commonwealths.

Within organisms the respective cells coöperate in a unified tendency to development. Due to disproportionate enlargement, division, or

differentiation, there are minor stresses and strains set up within growing tissues. Usually these are not so pronounced as to disturb normal development, and are to be regarded as the inevitable sacrifices that one cell must make for another in order that progress may be accomplished. Occasionally these pressures and tensions may attain sufficient magnitude to push into the conscious realm as growing-pains, and thus constitute a temporary disturbance. In rare instances they may prove destructive, as when the leaf stalk of a May apple is held for a day or so in a horizontal position, prevented from bending upward as it normally would. Upon being released, it curves over so quickly and so tightly that the surface tissues on the lower side are entirely disrupted. But on the whole the cells of the growing organism, far from consuming each other, live together in a state of mutual coöperation, accomplishing results that would otherwise be impossible.

And so with the body politic: minor frictions, jealousies, and ambitions are the normal unavoidable accompaniment of development. Occasionally growing-pains may thrust themselves into publicity in the form of strikes, bitter political contests, and K. K. K.'s. Rarely do they reach the proportion of revolutions, when destruction of life and property is the dire consequence. Not competition but coöperation is proving to be the watchword of successful social development. The oblige parasite that entirely consumes its host destroys itself also. Many a disease-producing organism has doubtless fallen by the way in the course of organic evolution, and for this very reason.

Industry is discovering that the same principle holds for its own progress. Capital is recognizing as never before the need of its harmonious

articulation with labor, and labor is realizing that capital too is necessary for its welfare. The layman is becoming aware of his debt to science, and the scientist is conscious of his responsibility to the public. The producer must satisfy the consumer, and the consumer must compensate the producer. Children must receive the advice of their parents, and parents are bound to respect the liberties of their offspring. It is only by such mutual respect and coöperation that progress is possible.

Phagocytosis occurs in industry when a subordinate has nothing good to say about the executives over him; phagocytosis occurs also when a superior fails to recommend a helpful subordinate, in order that the latter may be retained without increased reward. It occurs when a subordinate seeks to displace a superior; it also occurs when a superior signs his name to the work of a subordinate without giving the latter proper credit for his contribution.

Mutual coöperation occurs in industry when the foreman criticizes his subordinates first privately, and only as a last resort to the manager. Mutual coöperation in industry also occurs when the subordinate first submits his grievance to his immediate superior, and not to his colleagues or to the man higher up. It exists when the worker gives his best service, and when the executive does his best to promote the pay and privileges of the employed.

VI

Growth, then, consists of four phases: enlargement, duplication, differentiation, and coöperation. No one, two, or three of these alone constitute growth. Enlargement alone tends to become swelling, intumescence, hyperplasia. In spite of the fact that we

ordinarily regard gain in weight as an indication of good health, yet we are all aware of the objections to obesity. Despite the fact that Los Angeles with its several suburbs is proud of becoming a super-city, China and India have taught the world lessons in the perils of overpopulation. When business becomes too big it constitutes monopoly, endangering the rights and well-being of others. Rapid increase in size is possible by enlargement alone; but such growth is not conducive to stability. The mushroom pushes up out of the soil by cell enlargement exclusively. There is no accompanying cell-division to give its tissues compactness, and no accompanying differentiation to give them firmness and permanence. In metaphysical and social matters we must also be wary of mushroom methods of expansion.

Neither do enlargement and duplication together comprise growth in its highest expression. Such may entail only needless repetition, cancer, hypertrophy. Too many competitors are just as destructive to business as is monopoly. 'Too many cooks spoil the broth' and 'Too many irons in the fire' are just commonplace expressions for the dangers of duplication. Versatility

may be only a polite expression for vacillation.

Nor do augmentation, multiplication, and specialization together form a complete basis for healthful development. Without harmony they may result in discord, phagocytosis, war. Harmony is the keystone in the arch of elaboration; without it the rest of the structure falls into chaos and ruin. Harmony between God and man is the basis of religion. Harmony between man and man is the basis of society. Normal healthy development, whether it be in plants, animals, or man, involves an harmonious regulation of multiplied and diversified expansion. Absence of harmony is disease and monstrosity. Sanity in the psychological realm is the consequence of the harmonious association and evaluation of ideas; the absence of harmony is obsession, perversion, and hallucination. In social, political, and industrial affairs love, peace, and prosperity are the results of the harmonious interaction of expansion, diversification, and compensation; the absence of harmony is cutthroat competition and war. Growth in whatever realm rests upon these universal principles of progress, for the universe is one and indivisible.

A PICTURE PEDDLER

BY ROBERT ALDEN REASER

I

TRANSCONTINENTAL motor-trips are not unique in themselves. Whatever distinction mine may have possessed was due in great part to 'the Duchess,' Bobby, and attending circumstance. To begin with, I was convinced that I could pay for gasoline, food, and incidentals through the sale of oil sketches and pastels made along the way. Incidentally, I was determined to tackle any kind of work for which, as artist, ex-soldier, and vagabond of some experience, I might be fitted. I asked of the Fates only that they afford a good summer's experience, pleasant adventure, and enough monetary reward to pay expenses. At the outset I borrowed three hundred dollars to pay for a car and a month's living. If quick returns were not produced the expedition would go on the rocks somewhere in the Middle West, where so many road-shows have met their doom. But this one-man troupe must be a success — if only to vindicate my repeated glowing assertions of its possibilities, by which skeptical friends had been amused but not impressed.

With the borrowed money in my pocket, I chose an encouragingly sunny May day on which to search for a car. The instant I laid eyes on the Duchess I knew she would do. Another type of Ford had been in my mind — a commercial body fashioned after the manner of the ambulance in which I toured France for two years. But the Duchess, though fundamentally

nothing but a well-worn touring car, possessed a superstructure at once unique and desirable: a special enclosed top, with glass panels and isinglass windows, which disappeared into the upper reaches after some persuasion, leaving the interior as well ventilated as a roof garden. Why did I call her 'the Duchess'? Because there is always something humorous about a duchess, and because there was about the car a certain intangible dignity which later took her proudly into the company of the most rudely hilarious.

I drove out into the press of machines on Fifty-third Street feeling decidedly self-complacent, for young painters of my small reputation and with my aversion to present-day commercial potboiling do not often find themselves sole owner of even a three-year-old. No intrigante ever whispered more persuasively of Romantic Adventure at the ear of attentive youth than did her ladyship in mine.

Outfitting any kind of trip, be it only a week-end in the suburbs, is a profound effort to me because of my propensity for taking everything that might possibly be of use in any climate under any conditions. Now for equipment. In the first place, enough clothes were essential to withstand long and arduous days on the restless seat of a Ford; to cope with chill mountain mornings, hot prairie afternoons, and innumerable rainy nights; to meet such

an emergency as a speaking engagement before the Women's Club of Oshkosh or a visit to the home of a cordial millionaire. By heroic manipulation I succeeded in getting everything into two suitcases — everything except a heavy overcoat, a raincoat, and a straw hat. The latter was somewhat of a problem, but was finally placed in a paper bag and pinned to the top of the car. It was proved superfluous in the first thousand miles and was ultimately traded to a newsboy for a Sunday paper.

Next came sleeping accommodations; a culinary department complete enough to handle at least three good meals a day, with an extra set of eating implements for the chance guest; a repair outfit capable of meeting all exigencies not complicated by serious breakage; and a revolver for defense. Condensation began to be imperative. To eliminate a tent I had the back of the front seat cut down the sides and hinged at the bottom so that it would turn over to join with the rear seat in forming a bed, comfortable in inverse proportion to the height of its occupant. Personally I am over six feet. For bedding I got out the old army-blankets and rolled them up inside a ground-sheet.

The cooking and dining appurtenances — an odd assortment of telescoping pans, tin cups, mess kit, and jars of flour, sugar, salt, pepper, and the like — were compactly stored in a pail and a tin tool-box. Out of respect for tradition I put the necessary mechanical accessories, including a tow-rope, under the rear seat where, when the car was well packed, they were as completely inaccessible as they would have been inside the cylinders. A small spade went on the running-board beside the grill for camp-fire cooking.

More trouble lay ahead in the shape

of painting materials. Salted down, they consisted of a suitcase filled to capacity, a folding easel, a folding parasol, a large portfolio, two gold frames (very essential to the selling campaign), and a large amount of prepared wall-board, in lieu of stretchers and canvas. This, I calculated, would take me to Alaska by way of Buenos Aires, if necessary.

All that remained to be considered now were the diversions. A fourth old suitcase took care of a library of one hundred and fifty five-cent books. A place was found for a small phonograph on the running-board. After a heated debate with myself I compromised with one golf club and a dozen balls. I should have preferred a tennis racket, but it is harder to play tennis by yourself. A radio I did not care to have; neither did I take a crossword-puzzle book.

Up to the moment of stepping on the starter, I had planned to go entirely alone. But the inquiring, hopeful expression which animated Bobby, my dog companion of many adventurous wanderings, proved impossible to resist, and I whistled to him and made room beside me on the seat.

A word about Bobby, for he, like all family pets, is no ordinary one. It was in the Vosges Mountains of France in the winter of 1917-18, when my section was resting after a strenuous turn at Verdun, that we first became acquainted. I was a nineteen-year-old buck private, he a three-week-old ball of energized fur. He was given to the section as a mascot and for a year and a half toured the Western Front with us, saw Belgium at the time of the Armistice, and shared our spring vacation in the Army of Occupation. He did not, as a lady once asked me, 'drag the wounded out of no man's land,' but he frolicked through the vicissitudes of camp life with such comic

abandon and unfailing spirits that he more than served his turn in keeping up the general morale. I thought him only an exceptionally intelligent mongrel; but when, after our discharge, I took him to dog authorities in Paris, I found he was a wire-haired griffon of good points.

And so it was that the Duchess, Bobby, and I started West.

II

I stopped at the near-by filling-station for an initial load of gasoline. Here I found the first example of that friendly interest in the motor traveler which I had not expected until I reached the Western auto-camps. The garage man as he pumped the gas looked my conveyance over.

'You've got quite a load there. Going far?'

'As far as I can push her — California, I hope.'

'That so? I just drove up from Texas myself. Better drive around that way. That's a pretty heavy load you've got there, is n't it? How many in your outfit? Nobody else? That's a good-sized load you've got. Well, good luck to you.'

I steered my course through dripping, glistening Manhattan, ferried across a Whistler's Hudson, and, disembarking on the Jersey shore, headed for Philadelphia along the Lincoln Highway. We reached the environs of Philadelphia late in the evening, and I was glad to spend the night with some friends. As yet I had evolved no system which promised any success in making up my bed while it rained, without unloading half the car and getting the contents well soaked. I preferred to practise on a dry night.

I proceeded to tour Philadelphia in search of an egress that did not run to Atlantic City. This outlet-hunting in

a large town is a problem unless you are on a marked thoroughfare, and it was with a sigh of relief that I found a surprising sign which announced that San Francisco lay ahead. I was back on the already familiar Lincoln Highway, well designated by red-white-and-blue poles. This return to an important route with which one has had previous experience is a pleasure akin to renewing friendships.

As soon as the city limits were reached, I gave the Duchess her head and we bowled along merrily through the beautiful emerald valley country in which lie Lancaster and Gettysburg. The skies were smiling again, and the freshly laundered fields and groves were a joy alike to my eyes and to Bobby's nostrils. Even the Duchess purred her content.

How the fields of Gettysburg should stir the imagination, and how poorly do they do so in their present condition; for a thousand ugly white monuments scattered over too well-kept lawns make it difficult for even a war-time vision to reconstruct in fancy the three great days commemorated. 'Better marked topographically and artistically than any other battlefield in the world,' the Blue Book tells one.

That night I felt in the humor to drive right on to California, and it was well on toward midnight before sleep seemed imperative. Finding no inviting spot on the highway, I turned off on a crossroad. This wound over small rolling hillsides for several miles with no signs of a possible pasture bedroom, a thing not easy to locate in the dead of night with none-too-good headlights. At last a break in the fence on one side was discovered and I drew off the road, not daring to go far into the freshly ploughed field ahead. I unloaded a few layers of cargo, putting the excess under the machine, and made my bed by the

light of a young moon, to the throbbing accompaniment of the insect world. Bobby found traces of many exciting animals in the neighborhood and it was with difficulty I persuaded him to turn in beside me.

The night so pleasantly begun was not to be uneventful. Barely had sleep overtaken me when I was startled by a staccato report. It took me some time to think of looking in the right place, for although I had expected trouble with the ancient tires possessed by the Duchess I was not prepared to have them blow out when I merely rolled over in bed. Making ready to renew my slumbers, I discovered the absence of Bobby, who it now appeared was having a hilarious chase after a galloping herd of cows silhouetted at the top of an adjacent hill. By the time I had persuaded Bobby to return to bed, the first cock was calling lustily for more light. His wish was shortly granted, and with the dawn came the farmer, a solemn-faced Swede, who announced from his perch on a harrow that I should have to move from the one entrance to his field.

The tire changed, breakfast accomplished, and Bobby dragged away from the spot where he had been barking for an hour under the fond delusion that he had treed a rabbit, I called a farewell to the ploughman and then steered back to the main highway. Up, over, and down the long Allegheny grades we rolled until well along in the afternoon the suburbs of Pittsburgh unfolded themselves to my view and I stopped to ponder over the beauty of Turtle Creek. Here, in a setting surpassed by only one American city, man has created a unique masterpiece fashioned of steel and smoke. Strangely enough it is the black soot that, descending alike on massed shacks and cottages, towering chimneys and scarred hillsides, has composed them

into a gray tone-poem. Little seedling locomotives scurrying around on the floor of the valley engender vast columns of virgin-white smoke to add a colorful accent. The throbbing machinery drones an accompanying chant that finds an echo in my singing heart. It is seldom that Big Business, either by accident or intent, has woven such a spell of enchantment about itself.

I was tempted to try putting my impressions on canvas, in spite of — perhaps because of — the familiar use of the subject by Pennell and Lie. Besides which it was high time I began to think of adding to my hoard. What better place to start than Pittsburgh, where the International Exhibition, then in progress, should have educated people up to the importance of owning pictures — 'real hand-painted' ones? So I settled down for an hour to do a sketch to fit the smaller of my two frames, the while I dreamed pleasantly of how some passing motorist would shortly stop to see my study, like it, and offer to buy it for a fabulous sum. But my only audience was a group of young miners homeward bound.

'Gee,' said one of them, after watching awhile in silence, 'if I could do that I would n't work.'

The painting as complete as I cared to make it, I hunted for and found a near-by auto-camp in which to lie over until the morrow. As I was making preparations for dinner a shiny new Cadillac drew up beside the Duchess, and out of it climbed a family of three, father, mother, and a girl of twelve — all dressed in spotless sport-clothes fit for a country-club verandah. The child immediately became interested in Bobby and we all exchanged greetings. 'Mother' had difficulty in suppressing her amusement over my outfit, circling it several times. Meanwhile 'Father' watched with keen, absorbed

interest my wood-cutting and fire-building activities. Threatening darkness convinced them that they should begin their own meal, and the preparations for this were even more amusing to me than mine to them. First they unloaded a large straw hamper containing a complete cooking and eating outfit: bright new silverware, aluminum pans, nickel cups in a leather case — everything for an emergency, and all new and apparently unused. Then a large steak, potatoes, and various accessories were unwrapped. But it was the appearance of a Boston Cook Book that incapacitated me for the time being, and it soon was apparent from their remarks that none of them had ever attempted to cook a meal before. I tried to be oblivious to their struggles, but dreaded the thought of what would probably happen to that succulent steak. (I was dining on frankfurters.) Finally they came to an impasse, being entirely at odds over the problem of whether coffee should be cooked twice or only half as long as potatoes. 'Mother' finally approached me for advice. My reply must have sounded authoritative, for it was not long before I was installed as chef while the enchanted family stood about and beamed its gratitude. This arrangement was entirely satisfactory to all concerned, even to Bobby, who gorged himself on frankfurters.

After breakfast next morning I brought forth the sketch with an eye to business, but although my wealthy neighbors were politely interested it never occurred to them to offer to buy it. I had been so confident that sales of this kind would be easy that, disappointed on my first attempt, the sketch looked like a white elephant to me, the trip already imperiled.

But the day was too fine to permit of prolonged gloom, so I breezed into Pittsburgh feeling reckless enough to go

into a barber shop for a shave. Then, too, I had been told that barbers were gullible souls and could be persuaded to buy almost anything. I set my sketch, with its still glittering gold frame, in a conspicuous place and gave myself contentedly into the barber's hands. Interest was keen enough, but it was centred more on myself and my dog than on the picture, and when some new calendars showing buxom bathing girls were exhibited my heart sank, and I knew that here was another failure. Had I only thought to bring some life-class studies!

Once more I turned the Duchess westward. On the outskirts of town I stopped at a gas station with an almost empty tank. As the attendant drained the hose I had an inspiration. Again the picture was produced.

'Say, buddy,' I began airily, 'I'm a New York artist down here to see the Exhibition. I dashed off a sketch on the other side of town and, although I could take it back to New York and sell it for fifty dollars, it seems as though somebody in Pittsburgh who knows the place ought to own it. What do you say — how much am I offered for it?'

'Well,' he drawled back, 'I'd like it better if it was Tennessee, but I'll trade you the gasoline even.'

I staggered from the blow, but thought fast.

'All right, partner, it's a bargain, though it pains me to do it.'

I drove off much amused, leaving the Southerner dubiously staring at his new possession — wondering, I suppose, if he had been a sucker and what his wife would say.

III

From Pittsburgh I followed my nose toward Cleveland and Chicago. On the transcontinental roads, one passes

many so-called 'hikers,' some of whom carry large signs on their backs announcing that they are going all the way across. They turn to you with pleading gestures and beguiling smiles, especially when you are in a Ford and alone. Several times, feeling in the mood for a little companionship and hoping to find an interesting personality, I stopped and took one aboard. Bobby never was pleased with these arrangements, for it meant that he had to perch on top of the luggage in the back seat. Each time I tried this experiment of being congenial I had such bad luck in my choice that I usually swore never to do it again.

It happened that I was in for my share of hold-ups. The first occurred during a black midnight hour on a precariously winding road miles from a town. Strange groping branches clutched at the Duchess from the dense mass of trees on either side as if resentful at being disturbed thus late. My mind going back to war memories, I turned off the lights for a moment to find whether or not I could still hold to an invisible pathway. Darkness rushed in on all sides so swiftly as to make the experiment foolhardy. I again switched on the lights. The two beams leaped forward and, pushing farther and farther ahead, illumined the figure of a man standing in the road. His costume was shabby; a cap was pulled low over his eyes. He held up one empty hand, but, when the Duchess showed no intention of even hesitating, the other hand menacingly brought forth an automatic. Thinking spontaneously, — it was all over in a fleeting, breathless moment, — I slipped my own revolver from its holster beside the seat while I applied the pedals as if to stop. Then, coasting up to the man, I suddenly jerked the front wheels in his direction, forcing him to jump back. For the moment his gun

was pointing heavenward as he sought to regain balance. I pressed the foot-throttle deep. The Duchess leaped past down the highway, roaring defiance, while I discharged my gun through the open window. I took no aim — it was merely a warning, or a small boy's gesture of bravado. The bandit proved equally anxious to show that his was no glass toy filled with candy, for he sent a bullet winging through the back of the car before we could careen around a sheltering curve to safety.

My second bandit proved to be the traffic policeman of a small town. When I unwittingly disregarded his gesture to stop, he became irate enough to board another car and overtake me at the next corner. I seemed not to help matters by explaining that he looked not a particle like any policeman I had ever seen. He was all for taking me back to the town hall and fining me. But before this could be done Bobby stepped in to save the situation for us. He had been sitting peacefully on the seat beside me. He now rose up for a stretch. The constable took notice of him for the first time and showed unmistakable signs of being a dog-lover. I jumped at the opening.

'Of course you never saw one like him before. There are probably not a dozen in the country. Got him in France — war-dog — used for hunting over there.' Then I got out of the car and, sitting on a convenient park bench, put Bobby through his not inconsiderable repertoire of tricks: counting, saying his prayers, catching food tossed from his nose, recognizing the difference between my imitation of an exploding shell and a dud (squatting for safety for the latter and playing dead for the former), turning around and rolling over, knowing his right from his left, skipping rope with me, and others of similar variety.

We had attracted a good-sized crowd, and the constable, delighted by the performance, exhibited an unexpected sense of humor combined with a commercial talent. After making a little speech he jovially passed the hat, — 'to buy raw meat for the war-dog,' — collecting two dollars and sixty-five cents, which was then turned over to me. No further mention was made of the threatened trouble. I told the constable I needed just such a business manager as himself, and we parted the best of friends.

I went through Chicago hurriedly — in fact, almost too much so, for my brakes were practically useless and the traffic had been speeded up to a point where it was 'devil take the hindmost.' I toured around town considerably and in so doing — it was the first time I had motored in Chicago — I discovered that an early piece of information instilled into me during my grammar-school days was at last to prove invaluable, although I had long considered it more of a memory course than of intrinsic worth. This was my ability to repeat the names of the Presidents of the United States according to their historical order. Its application is in finding a specific Chicago street, for they are named after the same men in the same order. So much for education. But the case in hand also proves how lamentably weak are our present methods of education, for I had not been compelled to learn the Presidents backward as well as forward. As a result I could only be sure of my location when going in one direction.

I crossed Illinois rapidly, knowing that this was my best pavement for many miles to come and being anxious to get into more interesting country. Besides, my funds were getting alarmingly low, how much so I did not realize until I reached the borders of Iowa and

counted up. I had not started my intensive selling campaign as yet, for I was reserving it until I reached a Central Iowa town where I had spent some time previously and was not unknown. Then, too, there was a distant cousin there who might be of valuable assistance.

After the accounting, however, it began to look as if I might never reach that place. There was possibly enough money to buy gas and oil for the trip, but the reserve of food was negligible. We halted outside a tiny village, whose name I never discovered. Something had to be done, and one of the Muses, kindly disposed, stopped long enough from the pursuit of Art to help me feed two hungry disciples.

I sauntered into an ex-barroom with an inviting sign over the entrance — 'Eats.' Bobby followed with his nose to the wind. I sat down and ordered a sizable meal for myself and the best in the house for my dog. Then, looking the place over, I found what I wanted — a large space on the wall over the bar. I addressed myself to the proprietor.

'I'm an artist from New York, motoring across the country. My specialty is painting decorations on walls. Now you've got a place over that bar which just howls for a picture. I'll paint you one six feet long that will be a knockout — worth anywhere up to two hundred dollars at New York prices. What's more, I'll guarantee not to do another one in town, so that you'll have an exclusive feature.'

'I've got the only place in town,' he demurred, but he was obviously impressed. 'How much is this two-hundred-dollar picture goin' to cost?'

'Twenty-five dollars,' I hazarded.

He went back to swabbing the floor with only a grunt for reply. I did n't feel like bickering, so I came down considerably in my next offer.

'Well, I'm anxious to show you what I can do. I'll let it go for this meal and a tankful of the gasoline you've got out there in your pump.'

'All right, go ahead. If I like the thing it's a bargain.'

After I got out my painting materials and he decided I was not a revenue officer, he joined heartily in the proceedings, arranging a light and rigging an impromptu scaffolding. As my success depended upon his liking the picture, I sounded him for a favorite subject. Of my suggestions he seemed to prefer a figure-painting to pure landscape and, as he was an ex-gob, I thought water would be safe for a background. To cinch the deal, I outlined a 'Venus Rising from the Sea.' No Zuloaga ever created more interest. I laid it in rapidly with large brushes, using plenty of turpentine, and inside of two hours I had a regular Frank Brangwyn. As it began to be intelligible the proprietor became most enthusiastic. Every now and then he would rush out to the street and return with a fellow townsman, until a good-sized audience had collected. I have always regretted not having been able to paint one of the war posters in front of the New York Public Library, but this coup of mine was the next best thing.

My patron was so pleased with results that he passed out drinks to the crowd, filled up the Duchess (Bobby and I were already complete), gave me a five-dollar bill from the till, and begged me to stay for an impromptu party. I excused myself, saying I had a hard day ahead, and drove off.

IV

Dire necessity urged me to a long final drive to my immediate destination, an attractive town of some twenty thousand inhabitants situated among

gently rolling hills on the banks of the Des Moines River. The neighboring countryside promised much pleasant material for my work. Arriving in the early evening, I manoeuvred the Duchess, who was footsore, to the home of my cousin. Here a cordial invitation to stay as long as I desired was extended and gratefully accepted — how gratefully he will never know! Still more pleasing was his enthusiastically expressed wish to aid in the selling enterprise. Making no claims to a knowledge of pictures, he was, during the slackness in his own trade, — that of a tinsmith, — ready to bend all his energies toward the sale of my handiwork, good or bad.

The following day, after having procured a little advance advertising in the *Daily Bugle*, we two conspirators set off in search of some attractive landscapes. These proving plentiful, I selected one on the river bank, and while Bobby romped with some swimming urchins, and the cousin plied me with questions concerning technique, I laid in a swift study of a graceful bridge arching the rampant waters. Having carried this far enough to be intelligible, I moved downstream, accomplishing another before lunchtime. In the afternoon I tried painting the flat prairies outside the town, using a low horizon and attaining picturesqueness by piling up tier on tier of the frisky puffball clouds typical of the region. Of the three canvases I much preferred the last, as it seemed more characteristic of the country; but when, a few days later, I began to search for prospective patrons, I found a dozen of the brookside variety could be sold to one of the prairies. 'Oh, Iowa is n't really as uninteresting as that, you know. It's just full of cosy little picnic-places. And see all the hills here in town. You've made it look too monotonously level.' Only an occasional individual seems to feel

the unique beauty of the limitless grain-fields, with silos and farmhouses hiding in groves that dwindle and melt into the beckoning blue distances.

At the end, then, of this first day of painting I had produced two small sketches to fit the nine-by-twelve-inch frame, and one to fit the sixteen-by-twenty. Consulting with the cousin, we decided to ask seven dollars and a half for the smaller and fifteen dollars for the larger size, hoping by these modest prices to attract the many people who ordinarily never think of owning anything but a print because they have heard that all originals cost up in the hundreds. At these prices the day's work should net thirty dollars, and the cousin began to figure final returns on that basis. He even talked of modern efficiency methods applied to painting in order to speed up production, and thereafter, whenever I brought in a canvas with more than one foreground tree, he loudly protested at the use of too much time-absorbing detail. And when he found that the precedent of three a day was not to be lived up to he called it one more proof of the tradition that all painters are loafers.

Once engaged, the cousin proved a heartless manager. He relentlessly insisted on my accepting an invitation to speak before the Business and Professional Women's Club. This was terrifying. 'But think of the advertising,' reiterated the cousin. 'If you land with the ladies, your name will be a household word.' The outcome was foregone, and I sat up all night to produce a paper that to me was a masterpiece. I read it aloud at breakfast.

'Very pretty and high-sounding; but what's it all about?' the cousin inquired.

My heart sank.

'It's an explanation of Art written for the layman.'

'Well,' he announced, 'it means nothing to this tinsmith. What, pray, are "values" and "interesting line" and "good color" and "mood"?''

It was apparent that the paper had failed in the very purpose for which it had been conceived. After some meditation I thought of a possible way out. Instead of telling my audience of what that mysterious thing called Art consists, I would show them! So on the evening of the appointed day I appeared before the assembled ladies garbed in a smock (for atmosphere), and loaded down with painting materials, pictures, and much literature. I read some of my would-be serious paper, made a few random remarks on the development of modern painting, illustrating with reproductions, showed my recent canvases, and finished up by painting a fifteen-minute sketch before their eyes. When I feared interest was lagging I recounted a few anecdotes of the studios. What it lacked in unity and coherence the performance made up by its unexpected turns, and I was gratified by my apparent success in holding the attention of the gathering.

The cousin was enthusiastic about subsequent newspaper notices.

'That's a great start — I guess you knocked them for a row of pins that time. Now when you do the same for the Kiwanis Club next Thursday we'll have the town eating out of our hand.'

'Kiwanis Club,' I moaned. 'What is this game?'

'Thursday — twelve sharp — at the hotel,' was the unperturbed reply. 'You will be allowed twenty-five minutes at the close of the luncheon programme. You go on after the Girl Scout orchestra.'

Too weak to argue, I attacked the new problem with what good grace I could muster. Entertaining a roomful of business men, hilarious after a large

meal and a general song-fest, is a different matter from seeking to interest the more impressionable other sex. On Thursday at 12.55, when 'Mr. Robert Alden Reaser, New York artist,' was introduced, I took the bull by the horns and proceeded to recount a series of personal war-anecdotes. Whenever at a loss for words, — often the case, — I resorted to a rapid crayon sketch to illustrate or point my story. To my immense relief the idea caught on with the crowd. My stage fright vanished, and when the time was up I was so enjoying the fun of working for laughs in true vaudevillian manner that I should have liked to continue indefinitely.

These talks added materially to my growing reputation about town and, as our stock of landscapes had grown, we thought it time to invite some sales. But time flew without results and I began to be nervous. An exhibition downtown seemed to be the best means of arousing interest, but I had no resources with which to back such an enterprise. Quite obviously we could not hope to sell the pictures unless someone could be persuaded to look at them. Accordingly we made out a list of possible victims, piled the Duchess full of canvases, some still wet, and proceeded to tour the town, giving private exhibitions in homes wherever an entrée could be obtained. This method, after all, is the ideal one for placing pictures, for they can be picked out to fill and properly decorate a barren wall-space, which function is their real reason for existence. I wish I could relate all the humor of that house-to-house canvassing. Of the ladies who spent hours trying to choose between two pictures at seven-fifty or one at fifteen dollars, although the cousin attempted to help by pointing out that the larger pictures were three times the area of the smaller ones and

only twice the price. Of the individuals who thought the prices too high, or vice versa: 'What! Only fifteen dollars! And will everyone in town know that that is all I paid for it?' And of the sales ruined because husband and wife could not agree on the subject-matter: 'Well, that's my choice. You can do anything you like about it.'

The ultimate results of my sojourn in Iowa were most gratifying — I sold all but three of my forty sketches, and in addition two or three more important works. The most pleasing of these was an order for a good-sized landscape decoration in the new high school. For this a local subject was voted, so that it could be pointed out to possible embryo artists as an example of what might be done with the native scenic material. I selected the favorite panoramic view near town — a fine, sweeping vista including a bend of the river, hilltop groves, vivacious skies, and a stacked cornfield in the foreground. It was pleasant, indeed, to have the opportunity to leave this big canvas in a public building, where to me it will always be a commemoration of the most successful episode, artistically and commercially, of my journey. At last I had eased off the shadow of my debt and was free to ramble where and as I willed, with no further need of pot-boiling for months to come.

Although business showed no signs of a slump, I now felt compelled to tear myself away. It was the middle of August, and I had the best part of my journey ahead of me. I was told that it was not safe to cross the mountains after the fifteenth of September because of the danger of becoming snow-bound. But sadder even than having to leave a thriving enterprise was the necessity of going on without Bobby. Reports continued to come to me that dogs were not wanted in California and I took no chances. He was put on a

train and shipped back home, while the Duchess and I, missing his companionship, shook the dust of Iowa from our treads and prepared to tackle the mud farther west.

V

From Iowa I worked north to Minnesota, then turned westward once more along the Yellowstone Trail. I was totally unprepared from anything I had seen or read to find the wheat-fields of the Dakotas so thrilling. An ocean of soft gold and mellow violets, caressed into motion by faint breezes and traversed by majestic shadow-ships! An ocean more perfect in the quality of its color-harmonies than an Atlantic or Pacific, and saved from mere prettiness by its magnitude. In spite of the bad roads, tire troubles, and a high wind that blew out all my windows, I remember the days spent in crossing these States as some of the pleasantest experienced along the way.

I made friends with the Indians on the Northern reservations and found them more picturesque than I had been led to believe. Although they have succumbed to an extensive use of our hideous male habiliments, they still retain enough love of color and ornament to save them from lapsing into the monotone of the whites. The women have even profited in many cases by a gypsylike use of full, brilliantly dyed skirts and gay kerchiefs, although there are injudicious ones among them who verge on burlesque — such as, for instance, the maiden I encountered who wore an emerald-green silk shirt, pink knickers, and brown shoes and stockings.

It is strange that we have had no really fine paintings of our Indian life. Certainly there is no more picturesque figure-material to be found; yet, in spite of the fact that there is a

group of painters who devote their entire time to depicting our aboriginal race, we get nothing but a weakly decorative type of canvas more suited to be used as backgrounds for groups at the Natural History Museum than as genre paintings of artistic importance. I have never, in standing before one of these Indian pictures, been made to feel that the painter had a deeply sincere understanding of or sympathy with his subjects — such as, for instance, one feels on viewing Millet's peasants, Zorn's bathers, the aristocrats of a Gainsborough, or the music-hall performers of a Degas.

Of the many States I have traveled through in my search for Beauty, Montana reigns supreme with me — which statement has nearly cost me my life in California. Running, as it does, from the gray plains of sage- and rabbit-brush, through verdant river-valleys bordered by green-swept hills, to those most exquisite examples of mountain loveliness within the confines of Glacier Park — it is a symphony of endless fascinating variations. Nowhere can Yellowstone approximate the ethereal melody of Lake Bowman, toward which I had to urge the complaining Duchess over a fearful road that guards the beauty from the usual asphalt-loving tourist.

My few attempts at mountain scenery were not entirely successful, and I again came to the conclusion that it does not form good painter's material. Our pigments are too earthy, our techniques not subtle enough to entrap the evanescent moods and intangible loveliness of mountain woodlands and lakes. Perhaps it is just as well not to challenge Nature at her best — she has plenty of commonplace moments with which to vie.

Feeling this, I was content to roam on foot or on horseback over these royal hillsides, or, sitting beneath a

giant fir, to lose myself in contemplation of some lake unruffled by my gaze. But this feeling of incompetency was not a justifiable excuse for my inaction, it appeared, for on the few occasions when I dared to wield a brush I disposed of the results, unsatisfying as they were, with surprising ease.

As a grand finale to the pilgrimage across Montana, my path into Idaho led through almost a hundred miles of virgin forest, so superb in height, so grandiose in conception, as to make our Eastern ones seem very puny indeed. I think back upon them now with more pleasure than upon the California redwoods, for the latter are tremendous egoists that have stamped out other forms of vegetation, leaving in place of the rich pattern of tangled undergrowth beloved by all woodsmen only a brown waste as barren as a well-worn campground. The nights I spent beneath those awesome Northern trees, — a full moon picking out their regal old trunks with her light and bathing an occasional snooping bear in a pool of phosphorescence, — those nights will rank with the most spectacular of happy reminiscence.

As September advanced and the threat of snow became more ominous, I pushed on through the Rockies and the Coast Range to the Pacific at Seattle. From there, now following the shore line, now bearing back into the big-timber country for a glimpse of a national park, I drifted southward. For the first time I found my old love, the ocean, disappointing. Though still fascinating in its changing moods, its surging life, and its easily whispered promises, it seemed not so beautiful as I had hitherto found it. The color was often monotonous, often too pretty, and my eyes missed the endlessly

varying mountain shapes over which they had been roving with such infinite pleasure.

Reveling in it all, I gradually worked my way into California, until one fine October day I entered Oakland and crossed by ferry to San Francisco. As the Duchess sputtered merrily over the steep grades in this picturesque American city, I thanked her affectionately for the splendid fashion in which she had accomplished the arduous journey. For, although we spent many more pleasant days together in rambling about California, this was our virtual objective, the attainment of which fulfilled my most sanguine hopes.

I said good-bye to my car somewhere in Los Angeles. Business in the East called and, although the Duchess had been the most faithful of mistresses, there was no way of taking her back with me. Besides which she had a serious internal complication that might at any moment evolve into a death rattle. I drove her to the establishment of a secondhand dealer the day I planned to leave.

'How much is she worth?' I demanded hopefully.

'Forty dollars.'

I drove to another place.

'What will you give me for the outfit?' I inquired, less hopefully.

'Forty dollars,' was the reply.

I decided to try strategy.

'Bah,' I said, as I stepped on the starter, 'I was offered fifty-five down the street.'

'Wait a minute, partner. She looks like a pretty good Lizzie. I'll give you sixty.'

'Sold,' said I, and, giving the wheel a final affectionate squeeze, I pocketed the money and headed for the station on foot.

A MODERN UNIVERSITY

BY ABRAHAM FLEXNER

I

THE term 'university' has a definite meaning on the Continent and a fairly definite meaning in Great Britain; but in America no copyright—legal or traditional—protects its use. A college, though the college is itself far from being a standardized institution; a chaotic mixture of primary, intermediate, industrial, and theological classes; an educational department-store containing a kindergarten at one end and Nobel Prize winners (or as good) at the other, with all possible forms and varieties of schooling and training, practical and professional, between, and a mail-order annex besides; finally, a college with a graduate school overlapping and a group of organically connected graduate professional schools—all are called universities in America. These brief characterizations are descriptions, not judgments. They are meant to bring home vividly the complexity of the existing situation; they raise in the first instance no question as to value or importance. Thus the analogy of the department-store is not meant to belittle; for the department-store is one of the triumphs of commercial genius. It purveys excellence as well as mediocrity and inferiority. Its tendency and effect have been not only to bring the products of science, skill, and art to the doors of all, but also to elevate the level of public taste. This is precisely what the large American universities are doing—diffusing

knowledge at the current level and by that very act raising the level; and not only diffusing knowledge, but, in laboratories and libraries tucked away in corners of the great institution, refining it and adding to its sum.

It would be futile to attempt to narrow or to change the use of the term. I propose to discuss a modern university that differs more or less from anything now called a university in America; and it is not a research institute, either. But it is idle to invent a new title; for a new name would have to fight for life and, if it survived, would soon be so freely appropriated as to lose precise significance. As it is impossible to expropriate existing institutions, it is best to adhere to the much-abused title.

To make clear what is in my mind I shall try to define my conception of a university adapted to modern intellectual needs, now inadequately met, by contrasting the proposed institution with the more comprehensive of existing institutions of learning. Thus we omit for the time being the mere colleges, sometimes hardly more than secondary schools, now called universities; we omit also the grammar-school, industrial, and theological classes, loosely strung together in a single institution, which have sprung up to answer current and rapidly changing needs in certain sections. We make the proposed contrast with the great educational department-stores made up of

colleges, graduate schools, professional schools, correspondence courses, and extramural classes, which, characteristic product of democratic conditions as they are, are borne along by forces perhaps beyond their control in the endeavor to be of service to all classes of the community.

II

The story of higher education in America has been often told and may for my present purpose be briefly summarized. The American college was in origin an adaptation of the English college—in scope practically a secondary school for the economically advantaged or for prospective lawyers, clergymen, and physicians. A fringe of poor students burning with the desire to learn was, however, always in evidence, in the old home as in the new. Increase of knowledge, increase of wealth, the spread of democracy, naïve faith that knowledge and power, education and intelligence, go together, resulted in the rapid expansion of the American college. New colleges were established in unprecedented numbers—by local communities, by states, by religious organizations, by individuals anxious to be remembered or inspired by the desire to pay the future for the advantages which a rich, new, wide-open country had bestowed upon them. No such rapid and extensive development could in a brief period have possibly been sound or homogeneous; that must necessarily be a matter of time. Meantime complications arose. The local high school developed. That displaced the college in the scale of values. It forced the college to be more than a secondary school. But the high schools themselves were uneven and unexact; hence the displaced and elevated colleges had, to a large and varying extent, to be high schools still. They

could not discard the type of teaching and discipline proper to a secondary school, though in age their students were fairly beyond the secondary stage. Moreover, the combination of unexampled prosperity, faith in education, and love of fun enormously increased college attendance, so that administrative problems quickly arose such as could be managed only by mechanism often harmful and inappropriate to students approaching one-and-twenty. These considerations explain certain characteristic features of American colleges—their number, their rapid increase in size, the unevenness of the student body, their lack of intellectual seriousness, their overlapping with the high schools, the excessive regimentation which holds students to a strict accounting, only to find that every formal requirement can be regularly fulfilled by essentially uneducated boys and girls.

So much for the troubles due to confusion of high school and college. Meanwhile, at the far end, another set of problems arose. Within the last century a new passion has been fanned into flame. There have always been searchers for truth, sometimes in religious brotherhoods, sometimes in academic communities, sometimes alone: Roger Bacon was, for example, a Franciscan monk, not entirely approved by his associates and superiors; Galileo was a heterodox university professor; Francis Bacon a lawyer, politician, and grafter; Franklin a printer; Mendel a priest; Charles Darwin an English gentleman. Students and investigators, each in his own way, these exceptions were in their day left to their own devices. Thus, as long as it was a rare hobby, investigation did not upset existing educational institutions.

But difficulties arose when research became general, as it has become

increasingly so within the last hundred years. After centuries of effort by isolated and unappreciated thinkers, men became aware of its importance and fascinations; research has almost become a fashion. An experimental and investigative technique capable of use on a large scale has been worked out in linguistic, mathematical, and scientific fields. The persons affected by this intellectual epidemic required certain conditions — places in which to work, books, apparatus, contacts, assistants, pupils, means of publication. The European universities, — in which from time to time original workers had always appeared, — plastic and loosely organized as they were in most respects, lent themselves rather easily to this new purpose; in America the college was forced to broaden its scope so as to accommodate advanced training and research at the far end. The American college was thus a high school at its beginning and a university toward its end. This looks complicated enough; the situation is, however, more complicated than it looks. For the three types of school — high school, college, and graduate school — are so intertwined that it is impossible to say what is high school, what is college, and what is university. Students, courses, and teachers are all involved in all three.

Specific dates are apt to be misleading. There have been investigators and scholars of high rank in old-fashioned American colleges — Agassiz at Harvard, Willard Gibbs at Yale, before either institution consistently thought of itself as a university in its present sense. But research was not recognized in America as one of the dominant concerns of higher education until the flag was nailed to the mast on the opening of Johns Hopkins University in 1876. Then for the first time an entire group of men were called to professorships because they were distinguished or

promising contributors to knowledge — Gildersleeve in Greek, Sylvester in mathematics, Rowland in physics, Remsen in chemistry, Newell Martin in biology, Haupt in Hebrew, Bloomfield in Sanskrit, Herbert Adams in history and institutions; and, later, Welch in pathology, Mall in anatomy, and so forth.

These scholars and scientists were grouped together as a graduate or university faculty; the seminar, the thesis, and the Ph.D. degree were imported from Germany; it was the avowed object of the university to increase the sum of knowledge, to train young men to do likewise, and to send them forth to spread the gospel. Few gospels have in so brief a period done so well. Johns Hopkins has itself produced a good-sized army of advanced teachers; its graduate school has been freely imitated; its professional schools have set up new standards toward which the rest of the country has rapidly moved.

But there was a fly in the ointment. I have spoken of the graduate school of Johns Hopkins University. Johns Hopkins University was not simply a graduate school; it too had from the outset an undergraduate department. President Gilman and his counselors were really interested in graduate work, in the university idea; but, alas, the colleges of that date were in the main conventional secondary schools, far below the standard of the secondary schools which in Europe fed the universities. There was hardly a college in the United States which in 1876 was adequately equipped to teach physics, chemistry, biology, history, and economics, and it was in these branches that the Johns Hopkins of that day proposed to cultivate research and to train investigators. Where were the graduate students to come from? There were, especially in science and

politics, almost no sources of supply! Johns Hopkins had, therefore, to offer undergraduate instruction in order to ensure a stream of graduate students.

Fifty years have now passed. Colleges galore and even high schools are capable of giving good undergraduate instruction, if only students embrace the opportunity. Graduate schools have multiplied; some are well staffed and well equipped, others extremely flimsy; no matter — they cultivate research and confer advanced degrees. Meanwhile other needs than the cultivation of research have made themselves felt. Eager to 'serve,' the colleges and universities have tried to meet them also. The result has been almost incredibly complex. Strong American universities — to mention no others — with resources ranging from \$30,000,000 to \$100,000,000 are nowadays at one and the same time (1) colleges for high-school graduates, some ill trained, some well trained, some serious, many trifling; (2) advanced schools for college graduates, some ready for advanced opportunities, others unready and incapable; (3) research institutions in which, usually in odds and ends of time snatched from a heavy routine, occasionally in well-protected and adequate leisure, professors, sometimes very competent, at other times less competent, and students, occasionally well trained and able, too often poorly trained and varying largely in ability, swell the volume of publications and sometimes the volume of accurate knowledge; (4) professional schools, sometimes well equipped, oftener not, in which faculties constituted partly of trained teachers, partly (usually largely) of local practitioners, turn out first-rate scientists as well as pattern-made doctors, lawyers, pharmacists, dentists, journalists, business men, and teachers; (5) extension institutes, sending out educational missionaries to

light candles here and there in the enveloping darkness; (6) correspondence and radio schools, seeking to offer at long range, by the penny post and wireless, guidance and stimulus to those with whom physical contact cannot be established; (7) athletic and social organizations, complex, expensive, in some respects good, in others very bad.

Most of these purposes are worthy, particularly in a democracy, where every individual is entitled to his chance, and where the merest chance may result in uncovering genuine talent. None the less, it must be clear that the seven categories which I have succinctly formulated — and they do not quite cover the scope of any of the really great American universities — represent from a qualitative point of view an amazingly widespread field: some are hardly more than trades; some are mere handicrafts, almost devoid of intellectual content; some represent intellectuality diluted; some go to the very limit of sheer intellectual capacity.

In every one of these schools, departments, divisions, or activities, there are weak students and strong students, immature students and mature students. The problem would be simpler if the university could take a single attitude toward the entire student body. But it cannot. The majority need sometimes more, sometimes less, parental care. A minority are ready for freedom. But the authorities are more afraid of harming the majority through lack of care than they are of harming the minority through excessive oversight. How, one asks, can a single institution discharge all the varied functions I have named in a situation as complicated as the situation which I have described?

America has its answer to this question in the form of one word: by means

of 'organization.' Magical word! Complex, interlocking, ramifying, varied, expensive enterprises have to be 'organized'; thus railroads, trusts, department-stores are made to work and to pay. Precisely the same is true of a modern university with its complex, interlocking, ramifying, varied, and expensive activities; they have to be 'organized,' else chaos and bankruptcy will inevitably result. A president with large executive powers, a squad of deans who serve as his lieutenants in charge of separate departments, schools, and activities, — there are approximately twenty deans in one university, — not to speak of a host of other officials with similar major and minor functions; central offices with records and accounting systems adapted from finance to education; requirements — entrance, curricular, graduation — worked out with mathematical precision or the semblance thereof; courses, units, credits, that are for the purposes of accounting treated as if they were as definite in value as ergs or foot-pounds; advisers, vocational guiders, psychological testers, personnel managers, coaches — all engaged in policing the variegated undergraduate body, in keeping them off the grass, out of the water, in the middle of the road, to the end that in due course, with character unsullied, diploma in hand, they may be severally returned to their mothers or landed in a congenial job! Meanwhile somewhere, more or less sheltered from the traffic, real thinkers — not a few — are also at work with groups of worthy disciples. I dare say nothing so widespread as this kind of university could have come about except as a matter of necessity. Boys and girls wanted to go to colleges, professional schools, and graduate schools; they had the money and the credentials. There was nothing to stop them; perhaps on the whole at this stage of

our development it was best not to stop them. Ways had to be devised to handle the business: so it was 'organized.'

In so far as the college is concerned, there are, happily, indications that steps are being taken here and there to select students, to create conditions more favorable to scholarship, to bring about order, concentration, and individual responsibility. Thus perhaps a few colleges characterized by intellectual earnestness may be created or developed. But unless American youth undergoes a revolution of which there are at the moment few symptoms, most American boys and girls will seek colleges not predominantly intellectual in outlook. Their problem, on account of the numbers involved, may have in the main to be locally solved — as the high-school problem has been solved — through funds provided by taxation. Thus, ultimately, different colleges may choose to do different things in their severally appropriate ways. As for the rest, it is idle to prophesy what will happen to American education if ever 'the water is squeezed out of it'; surely no nation will permanently go on devoting sixteen years to the kind of education American boys and girls nowadays receive as a result of their leisurely progress through elementary school, high school, and college.

III

From the conditions above described the graduate school seriously suffers. I said that the graduate school was designed to promote research and the higher training of competently educated students. Now, research is in the first place a highly individualized affair. Men work in all kinds of ways; the university must be so loosely put together that teacher and investigator are free to follow what are for *them*, not

necessarily for anybody else, lines of least resistance and maximum effectiveness. So much for the faculty. But something similar is true of advanced students. They are persons of mature years, presumably trained, in so far as the thinking and effort and devising of other people can ever train anyone. The graduate student is therefore most favorably conditioned if he is free. He knows the field of his interest; books, laboratories, fellow students, and faculty are all there to be used. It is up to him to work out his own salvation by making use of the opportunities and facilities which the university has brought together, partly for him, partly for other persons and purposes. Thus the university is essentially a free society of students, professors, and pupils mingling naturally in the pursuit of intellectual aims.

A fairly sharp line can, I think, be drawn between the lower and the upper activities which we have been discussing. The lower activities — activities belonging to schools and colleges — are to a considerable extent, let us say, adaptive or disciplinary in character. Schools and colleges deliberately try to create a wholesome environment; they try to make something out of their students, try to train them to orderly habits, try to make sure they know things supposedly needful, try to get them in some sort of acceptable shape, morally, mentally, socially. Schools and colleges are thus parts of the machinery by means of which society keeps from going to pieces, as it would go to pieces if anarchy ruled from the cradle up. Particularly on the moral and social side, the college — dealing, as it does, with the immature — has a good deal of responsibility for the maintenance of wholesome conditions, though, as 'boys must be risked, if there are to be men,' not even the college has to play either

nurse or policeman — far from it. On the other hand, the enormous and miscellaneous enrollment of the largest institutions justifies — nay, requires — a definite endeavor to provide, without forcing, a finer type of social influence than is apt, in present-day America, to provide itself. This is, however, a separate problem, which I cannot now undertake to discuss. On the intellectual side, with which I am especially concerned, the colleges have adopted an attitude and installed a mechanism which are, in my judgment, irrelevant and damaging. They are too conventional — too narrow in social and intellectual outlook, too credulous of the efficacy of machinery. Individuality should not be suppressed while it is being trained; human institutions are so defective and society so far from being really civilized that criticism ought to form an active element in education at every stage — criticism of ethics, politics, institutions, and so forth. Youthful radicalism is better than youthful smugness.

Moreover, colleges are prone to overestimate what they can accomplish by regimentation. High standards cannot be attained by conforming to requirements — so many hours, units, courses, testimonials, of this, that, or another sort. Again, nobody is wise enough and well informed enough, no matter how many secretaries, questionnaires, or colored cards he has at his disposal, to fathom the individual student and direct him to the course, the teacher, or the social niche supposedly preordained for him; nor would the student be educated if the trick could be done. Education and *ad hoc* training have simply nothing to do with one another; they are, rather, at daggers' points. Genuine education involves effort, risks, and some lost motion. The requirements of school and college will never educate a student unless he

consistently, persistently, and more or less in his own way tries to educate himself. Nevertheless, however these things may be decided, wherever the lines are drawn, schools and colleges do have some sort of parental responsibility for school pupils and college students.

A graduate school has, in my opinion, no parental responsibility whatsoever; it has no disciplinary responsibility. On the contrary, it ought to be the most skeptical and inquiring of intellectual agencies. It takes nothing on faith — neither Newtonian laws of gravitation, Darwinian theories of evolution, germ theory, Kantian ethics, democratic institutions, wisdom of the fathers, virtues of the jury system, nor anything else. Under the heaviest sense of responsibility for the truth, and therefore with the exercise of the utmost care of which the human mind is capable, the university is concerned to pursue the search for truth, wherever the search lead, and to train young men to find it, respect it, teach it, and, if need be, die for it. Only so can the vast forces which are latent in the human mind and which are being released from nature be brought to work for the general good.

No matter how broadly one conceives school and college, there would seem to be some real incongruity between the purposes for which boys and girls are sent to college and the purposes for which men and women resort to universities; between the objects which lurk in the back of the teacher's head in high school and college and the objects which are in the forefront of the student's own head in the graduate school of a university. Of course the two stages cannot be distinguished by a sharp line; but there is a genuine difference — the college to the very end, though decreasingly, being responsible for the boy, the university

having no responsibility save to truth. Organization, as loose, to be sure, as possible, but still organization for ends important to the *student* — that is the keynote of school and college; freedom, detachment, or shifting forms of organization calculated to run down and hand on the *truth* — that is a different thing, and that is the keynote of a modern university.

IV

As matters now stand, however, college and university, undergraduate department and graduate department, are so intertwined as to be more or less indistinguishable. Let us for the moment ignore pharmacy, dentistry, schools of business, correspondence departments, the radio, and athletics — activities that do not now conspicuously involve the search for truth or the training of men to carry on the search for truth. Strong-minded workers can perhaps be oblivious of these academic addenda — just as they must learn not to notice many other annoyances and irrelevancies. But look at the things they may not ignore; look at the things they are expected to do. In the first place, in so far as subject-matter is concerned, courses are commonly divided into three groups — courses primarily designed for undergraduates, courses open equally to undergraduates and to graduates, courses primarily designed for graduates. Graduates are sometimes found in the first group; both graduates and undergraduates are found in the second group; occasionally undergraduates may be found in the third group. If, as I have urged, the dominant aim of the graduate school is essentially different from the dominant aim of the undergraduate school, such overlapping is bound to confuse both teacher and student. In the competition of methods, the under-

graduate usually wins; forms of organization and accounting, methods of discipline and presentation, appropriate to the undergraduate student-body, have thus to a large extent permeated the graduate school; majors, minors, units, attendance records, course examinations, — all the paraphernalia which the American college overemphasizes in its endeavor to handle an unwieldy and heterogeneous undergraduate body, — creep into the graduate school, because where graduate and undergraduate, superior and inferior, are mixed the lower type tends to determine the 'set-up.'

Again, the teaching personnel discharges a double or a triple rôle. In one course the instructor, dealing as he does with undergraduates only, is the shepherd, charged with some responsibility for guiding the members of his flock; in a second the same instructor may have to teach boys and to unsettle men; in the third the same individual is a high priest, concerned with criticizing, transmitting, and increasing knowledge, with no personal responsibility whatsoever for the men and women who freely choose to hear him and heed him or not, as they please. Few individuals find the three rôles equally possible or congenial. Between the two attitudes involved there is an inherent incompatibility, with the result that, compelled to choose, the teacher as a rule — not always — selects or drops into the lower rôle; that is, he is apt to fall into a stride befitting an instructor rather than to strike the pace befitting a fearless pioneer. Meanwhile the material used or presented, despite the mechanical type of school organization, smacks of the graduate interest. The teachers are university heads conducting seminars, or recent Ph.D.'s looking forward to university promotion. Scholarship in technical form and aspect has thus

invaded the college years — witness the highly specialized character of the 'courses' offered. Thus, while school organization and school responsibility have crept into the graduate departments, specialization has seeped down from above into the secondary period.

Not infrequently in the strongest universities able scientists and scholars find themselves crushed by the uninteresting routine connected either with undergraduate teaching or, what may be more irksome, with graduate teaching organized in the undergraduate spirit. Some men do both well, spending themselves conscientiously much of the time on undergraduate routine, and then, in carefully hoarded minutes, forgetting themselves in the quest for truth and in irresponsible intercourse with a small number of workers really worth their while. Finally, a few workers, as I have already stated, succeed in making special terms which protect them against the irrelevancies by which their colleagues are distracted in the effort to lead successfully a double intellectual life. The resulting situation was neatly summed up recently in an after-dinner talk by the dean of one of the most populous of graduate schools: 'The college is a high school and the graduate school has become a college.' Thus, at a time when scholarly and scientific work has become of greater importance than ever before, the career of scholar and scientist is, by the pressure of numbers and organization, being made in some ways more difficult and less attractive.

V

I suspect I can anticipate the first objection that will be made to the foregoing argument: I shall be told that I am pleading for the transformation of the graduate school into a research institute, which, if accomplished,

will leave a large hiatus immediately after the college.

That is not, however, the form in which I visualize the situation. Research is, to be sure, a main function of the graduate school; but teaching as well as research is the business of the university professor. He is, however, the same kind of person, both as teacher and investigator. He does not stand in one attitude as teacher and in another as investigator — as he must, if he is to be at one moment a college teacher, shepherding boys, and subsequently a university professor, stimulating men. Alike as teacher and investigator, the university professor is relentlessly and irresponsibly critical — of himself as he is of others. His students are presumably mature men and women released from the control of family, school, and college. All that precept, regulation, and example can do to form character and purpose has been done. Henceforth they are responsible for themselves. Teaching students at this stage imposes no parental or pedagogical responsibility upon the university professor; he is there to offer the student opportunity to learn, opportunity to develop himself and his chosen subject. Such teaching is no easy undertaking; it is no mere incident to a life of research. The university teacher must master his field and keep abreast of it; in lectures, seminars, or otherwise, he must present this material so as to orient and stimulate his hearers; he must to a reasonable extent be accessible for conference to students who are competent and serious. But while in this sense it is his responsibility to teach, it is the student's sole responsibility to learn. When a professor has been at pains to present material coherently and to stimulate inquiry, his responsibilities end; the student takes it or leaves it as he can and will.

Let us try to be concrete. Hebrew, history, chemistry, and mathematics — it is not difficult to conceive how a real university professor would handle these. He is himself primarily interested in Semitic lore, in historical or chemical investigation, in mathematical speculation and research; if he have not such interest and capacity, he is no proper university professor at all. His students, however broadly grounded in high school and college in general history, general science, and modern languages, cannot at once participate at his highest level. It is, therefore, his business as teacher to give them such guidance and inspiration as will enable them by *their* efforts — not his — to attain the upper level. He offers lecture courses, practical exercises, and the like, in the process of which they can acquire technique, become familiar with literature, get some sense of the problems ahead. If they have capacity and industry, they will accomplish something; if they lack capacity or industry, they will fail. He would like them to succeed; he will in one or another way help those who try; but he will be neither nurse nor policeman. As they succeed, they progressively undertake more fundamental and independent tasks.

So much for subjects in the field of mere scholarship or mere science. But the point I am making — namely, that the university professor is a teacher in the highest sense as well as an investigator — comes out most clearly in connection with the professional faculties, medicine, law, or theology. Here, obviously, instruction has also a practical end — the making of doctors, lawyers, and preachers. But the university attitude and function remain essentially the same. A certain grouping and ordering of studies must, to be sure, be effected; and, as art is long and time is fleeting, a limited amount of

arrangement with reference to practical ends must be introduced. But the amount of oversight required is in America greatly exaggerated. If the student is really mature, trained, capable, and industrious—and he never will be, unless some institution treats him as if he were!—he needs only the same sort of guidance and stimulus that his fellow student gets in Semitics or history or mathematics. The faculty advises him as to the general arrangement and progress of his legal or medical studies; offers him facilities, opportunities, and counsel in the laboratories, the clinics, and the library—and there its duty and responsibility cease. It is his business to profit or not, as he will and can. Having done so much for him,—and it is no mean contribution of time and thought which the professor thus makes to the student,—the professor goes back to his reading, his researches, and the company of those who have won the privilege of intimate association; he must not be asked or expected to lead as teacher a life that destroys or seriously impairs his life as thinker and investigator. Under the most favorable circumstances, the needs of schools, colleges, and industry for highly trained teachers and investigators will bear heavily upon the university; the burden can be lightened, first, by elimination of the college, next, by throwing upon the advanced student himself a much larger share of responsibility than he is wont to carry under our present mixed system.

Thus, both in theory and in practice, the university must offer sound, effective, and devoted teaching; on the other hand, neither in theory nor in practice ought the university to adopt a coddling or parental attitude, whether the student be aiming at a Ph.D. in order to teach, an M.D. in order to become a practitioner of medicine, or at a research

career. All alike have outgrown, or at any rate should be treated as if they had outgrown, the discipline of the secondary school and college with their pedagogical technique and devices; for, as I have urged, secondary school and college are deliberately attempting within certain limits to mould personalities in connection with the teaching of subjects, while the university looks beyond persons to objective ends—skill, knowledge, and truth. I repeat that the college will do well to be as critical as it may, for there should be no abrupt break between college and university, between college and life. But at best the college works under certain limitations and employs certain calculated procedures to which the graduate school should be more than indifferent.

VI

If the argument is up to this point sound, certain inferences respecting the organization of higher education in the United States may be drawn. The graduate school and the college now overlap. Unquestionably this overlapping may to some extent stimulate college faculty and college students. But, on the other hand, it tends both to draw the college away from its proper function and to lower the plane of graduate-school activities. The two institutions should not therefore be merged, either educationally or even geographically—just as little as a Continental *Gymnasium* or *lycée* should be prefixed to a Continental university. Contiguity or merging involves, perhaps insidiously, the common use of staff and facilities. And the moment the university thus lends itself in part to the disciplinary and directive business of the secondary school, the university itself suffers. No matter how resolutely the American graduate school intertwined with a

college should determine to preserve its own proper attitude, sooner or later convenience, economy, or good nature would lead to trespassing.

I hold, therefore, that on the whole the intellectual interests of all parties are likely to be promoted by the detachment of the graduate school from the undergraduate college. The present situation is of historic, not logical origin; *were Johns Hopkins or the University of Chicago to be founded to-day instead of in 1876 or 1892, respectively, I hazard the guess that neither would possess an undergraduate department.* But this does not mean that universities can now suddenly abolish their undergraduate colleges. Already the cry is heard that the college is being stifled by the university. A general movement must, therefore, and should wait on a successful demonstration.

Conditions are, however, surely ripe for an experiment. And an experiment is fortunately in sight. Johns Hopkins University has announced a policy looking to the elimination of the first two college years and the A.B. degree, and the creation of a university faculty devoting itself to university work. Whether an institution can go so far without going farther, whether the last two years of the present college will not also be sloughed off or at least telescoped, remains to be seen; but in any case it will be interesting to watch the outcome. It is a distinct move — the first distinct move — in the right direction. Should the experiment succeed, it will be a god-send to serious students, who will be enabled to work out their own salvation, free from all the academic red tape which a graduate school partially identified with a college cannot, perhaps, help employing; and it will be a paradise for creative scholars and scientists who — still teachers, to be

sure — will be free of all parental responsibility for their students. That freedom will not occasionally be disastrous to students, I should not maintain. But parental care must some day cease, whatever the result. Indeed, it is open to doubt how much good is accomplished by parental oversight beyond adolescence. But no matter: no possible advantage to the weakling can justify a parental attitude on the part of a modern university.

Will there be any students in a graduate school which is not fed by its own undergraduate college? Johns Hopkins, in its early days, attracted a rare group; but there was no competition — it had the field to itself. In our own day, however, the strong professional schools pull students across the college line. Witness the Harvard Law School and a few outstanding schools of medicine; so also Millikan, Hale, and Noyes attract a large body of advanced workers in physics, astronomy, and chemistry to the remote California Institute of Technology. I do not believe that 'loyalty' will keep the best students at their old colleges against the magnetic influence of an eminent man offering genuine and undiluted university opportunities somewhere else. The American student will learn to wander when there is something substantial to be gained by wandering.

Another pertinent question is suggested by the mere mention of 'loyalty.' Will America finance institutions whose services are not largely local, institutions that have outgrown their collegiate alumni; finance them, too, on a salary scale that will make teaching and research — what they are rarely now — bearable careers? It will be interesting to see whether the public can be educated to appreciation of the broader, rather than the narrower, view. Assuredly, as democracy

needs intellectual distinction, it would be fatal to prejudge the issue by exhibiting too timorous a spirit.

It is not only the undergraduate years and undergraduate ways that must disappear under the conditions I have discussed. If the university is to be an isle of safety for scholars and students, certain other things will be eliminated, too. In its simplest form, the university is extensive and complex enough, with professional schools like law and medicine of indisputable intellectual quality, and chairs devoted to higher teaching and research in science, history, language, and so forth. There is nothing to gain and much to lose by including in such a university scheme schools of dentistry, pharmacy, journalism, business, and perhaps, as things are now going in many institutions, education. For the university's interests should be fundamental; the schools above named are as yet too practical, too empirical, to deserve inclusion. Needless to say, the extramural and other features will disappear from this kind of university. All these things have their value; society requires the services; they must therefore be arranged for, but somewhere else—partly, perhaps largely, I imagine, in universities of the present compre-

hensive type. Meanwhile the severer type of university does not cease to render service; on the contrary, it withdraws from the immediate, obvious, pressing, and readily appreciated, in order the better to do the important, difficult, and thankless.

Thus the range of certain universities, at any rate, would be greatly reduced; moreover, modern science and scholarship being what they are, these universities would be very irregular affairs. Men, money, and facilities do not come together in such ways as to make it possible to have a nicely rounded institution at the highest level. No single science would be completely represented anywhere; still less, all sciences; and institutions most concerned with science would almost inevitably be less adequately developed on the humanistic side—and vice versa. This has always been the case in Germany, where these things have, on the whole, been hitherto best managed. It is likely to be more strikingly the case in future, as the possibilities latent in every subject multiply. Nor does it greatly matter: the very incompleteness of single institutions will force all real universities in the higher sense to view themselves as parts of one great organic whole.

SPECULATION AND INVESTMENT

BY EDGAR LAWRENCE SMITH

I

A CANDIDATE for a position in the statistical department of a security house, when asked to define the difference between stocks and bonds, replied with confidence that stocks were speculative while bonds were conservative investments. Needless to say, he was not employed. Yet his answer was only a naïve expression of opinions quite generally held.

To 'speculate,' as defined by the Standard Dictionary, is 'to make an investment involving a risk, but with hope of gain.' No definition is provided for making an investment involving a risk but *without* hope of gain.

Many investors regard a clearly defined opportunity to enhance the principal value of their investments as a temptation against which they should turn their backs and close their ears. As a consequence, they are led to regard the act of renouncing all likelihood of capital gain as a virtue and of itself an assurance that they are avoiding all traces of speculation.

This accounts in part for the popularity of bonds as conservative investments. Investors have been encouraged by their legal and financial advisors to believe that all risk of loss has been removed from a bond issued by a company of the highest credit standing, through ironclad, trial-tested mortgage clauses, and that therefore it is conservative to invest in such bonds at prices that practically preclude any possibility of enhancing the values in

their capital account. The less the possibility of profit, the more conservative the investment — the more conservative the investment, the less the possibility of profit. Thus runs the cycle of argument which they are expected to accept as self-evident, requiring no statistical support.

To the extent that law and language are competent to remove risks from mortgage bonds, they may have been removed. But the chief risk connected with the long-term holding of bonds or mortgages has not been removed from a majority of issues. (The minority, which contain suitable conversion-privileges, are exempt from the principal investment risks, as will be shown later on in this article.) The chief risk lies in the field of economics, beyond the reach of mortgage clauses to control. It lies, on the one hand, in the nature of the dollar, and, on the other hand, in long-term changes in the general level of interest rates, and consequently in the prices at which bonds are bought and sold.

In my studies recently published under the title *Common Stocks as Long Term Investments*, considerable space is given to the elements of risk inherent in a majority of bonds and mortgages, but for the purposes of this article the following examples, bereft of their technicalities, will suffice.

Among the most conservative bond issues which could have been purchased in April 1902, were Atchison, Topeka

and Santa Fe General 4 per cent bonds, due 1995, and New York Central and Hudson River Railroad $3\frac{1}{2}$ per cent bonds, due 1997. Let us assume that a conservative investor purchased one each of these bonds in that month. Let us further assume that he was forced to realize on them in July 1920 because of heavy payments which he had to meet in that month. His loss in dollars would have been as follows:—

	Purchase Price April 1902	Sales Price July 1920	Loss in Dollars
Atchison 4's	\$1035	\$710	\$325
N. Y. Central $3\frac{1}{2}$'s	1090	620	470

Total Loss in Dollars. . . . \$795

This loss was due to no change in the credit position of the issuing companies, but was entirely due to a change in the general level of interest rates, which had risen almost continuously during the period named, so that bonds yielding a low rate could not maintain their principal value in competition with newer issues which were placed on the market at a higher rate.

The per cent of the purchase price lost was, for the Atchison 4's, 31 per cent and, for the N. Y. Central $3\frac{1}{2}$'s, 42.9 per cent. But this was not the whole loss sustained by the investor, for during the period from 1902 to 1920 the general level of prices had risen almost constantly, so that in each succeeding year a dollar became less effective in providing the necessities of life. According to figures prepared by the U. S. Department of Labor, the dollar in 1920 had only 37 per cent of the purchasing power of the dollar of 1902. So our investor had not only lost dollars, but had further sustained a loss through the shrinkage in purchasing power of the dollars which remained to him. Taking his two forms of loss together, he would have lost over 74 per cent of the purchasing power of the principal of his investment in Atchison bonds

and over 78 per cent of the purchasing power of his investment in New York Central bonds. And none of this rather extreme loss would have been due to any impairment in the credit position of either of these companies.

These illustrations focus attention on two elements of risk that exist even in the highest grade of bonds in addition to the element which is given most prominence by a majority of those who offer bonds for sale: (1) depreciation of the dollar; (2) a general increase in current interest rates.

The third element which exists in some degree in all bonds and is most frequently discussed is: (3) the changing credit position of the debtor company.

The credit position of a company is subject to change over a period of years, either through changes in management or policies, or through changes in the underlying price, wage, social, or industrial factors on which the prosperity of the company depends.

In the case of the two bonds cited, we have instances of heavy loss in principal value sustained by the holder of bonds of the highest character, due to an increase in the general interest rate and a coincident lowering of the purchasing power of the dollar. There was no weakening of the credit position of the issuing companies. These bonds have since recovered a part of their price loss due to a falling in the general interest rate since 1920, and have further regained a part of their lost principal value through an increase in the purchasing power of the dollar. But it may be many years before a holder of these bonds purchased in 1902 will recover the full purchasing power of the funds originally invested.

If, then, the purchaser of the two bonds cited was persuaded to accept the low annual return which they offered and to forgo any probability of gain in principal, on the ground that all risk of loss had been removed, he did not receive what he paid for. The risk still remained. We could not have classed him as a speculator, because his purchase did not coincide with the definition of speculation, but was

rather the act for which no definition is given, that of making an investment involving a risk but *without* hope of gain.

II

The aim of investment, as opposed to speculation, is to eliminate risk, on the basis of a thorough understanding of the nature of the risks involved in different mediums through which funds may be profitably employed.

There are two ways in which this can be done, both of which presuppose a clear understanding of the fact that every investment, no matter what its character, is, by itself, subject to special hazards. The science of investment, like that of insurance, consists of appraising the character of unavoidable risks and of neutralizing them through combination.

The first method is through diversifying investments, where the relative risks of individual securities cannot be clearly defined, but where, in combination, the probability of gain for the whole fund invested equals or exceeds the probability of loss. The second method applies where the character of the risk is clearly definable, and may be neutralized by creating a balanced investment position. Informed, disinterested judgment is essential to each method, and the purchase of a single security cannot be wisely made except in its relation to the investor's total resources, purposes, and commitments.

With regard to investments in common stocks, speculation may be reduced, and in the end eliminated, through diversification. Principal invested in the common stock of a single corporation is subject to the temporary hazard of hard times, and may be permanently lost as the result of a radical change in the arts or of poor corporate management. But changes in the arts or poor management have

never permanently affected adversely all the leading companies in the principal essential industries. By spreading the risk through diversified holdings in such companies, it has been found that risks of this character are effectively eliminated through the application of the same principles which make the writing of fire and life insurance policies profitable. The law of averages has been found to favor such a diversified holding of common stocks.

It happens, however, that, while intelligent diversification in common stocks eliminates the special hazards relating to the holding of a single stock, diversification in bonds does not accomplish the same result, for the reason that all nonconvertible bonds are subject to the *same* hazards, which are therefore not reduced by increasing the number of different bonds held. This can be brought out clearly by comparing bonds with contracts for the future delivery of a commodity, instruments whose speculative character is quite generally understood, but whose investment attributes are not so well known. The comparison will serve two purposes. First, it may present a somewhat different picture of the bond to those who have thought of it only as a highly secured credit instrument. Second, it will serve to illustrate how, through the balancing of risks, a single transaction of a speculative character may be offset by another transaction, with the result that the two, in combination, cease to be speculative and become investments.

III

There are hardly two instruments which, at first glance, appear to be so entirely dissimilar in character as a contract for the future delivery of cotton and a high-grade first-mortgage railroad bond. The 'Cotton Future,' as it is usually termed, is distinctly an

instrument of speculation. A large part of the business of the cotton exchange is speculative. The purchase of a contract for the future delivery of cotton by the average individual is not an investment, and can never be so regarded. Yet there are circumstances under which the purchase of a Cotton Future becomes an investment of the most conservative sort.

Bonds, on the other hand, constitute in current opinion the preëminent conservative investment security, and a majority of those who purchase bonds do so to avoid speculation. The greater volume of bonds now outstanding are held as long-term investments, and properly so. Yet there are circumstances under which the purchase of a long-term bond of the highest character can be regarded only as a speculation.

These two instruments, then, — the bond and the contract for the future delivery of cotton, — seem in the main totally dissimilar, and yet upon examination they are found to have certain points of striking similarity.

A bond, after all, is no more than a contract for the future delivery of dollars. A dollar is, by definition, a certain weight of a certain commodity of a certain grade. The commodity is gold; the grade is 9/10 fine; the weight is 25.8 grammes.

The coupons on a bond are a series of contracts for the future delivery of smaller numbers of dollars at regular intervals. The bond itself is a contract for the delivery of a much larger number of dollars at a single distant future date.

A cotton contract likewise calls for the future delivery of a commodity. The commodity is cotton; the grade is middling; the weight is 100 bales of 500 pounds each.

The weight and grade of the dollar and of the cotton bale are both established by governmental enactment.

If you buy a cotton contract or a bond and are in a position to secure fulfillment of the terms of each, you are entitled to receive exactly what the government has defined each to represent. Essentially they are quite similar, except in the length of time that they customarily run before becoming enforceable, and in the bulk and durability of the commodities involved. Both are frequently sold before they mature, upon terms influenced more by outside conditions than by changes in the credit position of those who have contracted to make the specified future deliveries. Cotton contracts are liquidated in part through the cancellation of one contract against another. Thus also are the greater number of bonds and other dollar contracts liquidated.

There is as much misunderstanding of cotton futures as there is of bonds. This results, from time to time, in agitation for prohibiting the dealing in contracts for the future delivery of cotton, on the ground that contracts are created for the future delivery of a far greater number of bales of cotton than exist. In this respect, however, they do not differ from bonds, for there are outstanding, in the form of bonds and other maturing obligations, contracts for the future delivery of a far greater number of dollars than exist. And yet the propriety of buying and selling bonds has never been questioned, and never should be. Under sound regulatory measures, there is no less economic need for a free market in cotton contracts than there is for a broad bond market.

IV

When a cotton mill buys contracts for the future delivery of cotton to offset other contracts into which it has entered for the future delivery of manufactured cotton goods, its investment

in cotton futures is one of conservatism — an insurance against loss which might arise from being without cotton contracted to be delivered.

When a trust company or an insurance company buys bonds, against its own promises to pay dollars at a future date, it is likewise acting in accordance with the highest principles of conservatism. It is insuring itself against loss which might arise from being without dollars it has contracted to deliver.

When, however, an individual, not engaged in the manufacture of cotton goods, nor having any commitments in terms of cotton, buys a contract for the future delivery of one hundred bales of cotton, he is speculating on the future value of cotton in terms of dollars. And similarly, to a greater extent than is usually believed, when an individual, not engaged in banking or insurance and having no present commitments to pay a fixed number of dollars at a future date, buys a bond which promises him only a certain number of future dollars, *he is speculating, whether he realizes it or not, on the future value of dollars in terms of cotton* (among other things), or rather on the exchange value of dollars in terms of those commodities and goods which he or his family may require — the cost of living.

The situation existing under these two forms of speculation may be expressed in terms familiar to the speculative markets as follows: an individual purchaser of Cotton Futures goes long of cotton and short of dollars; an individual purchaser of bonds goes long of dollars and short of the cost of living.

A careful appraisal of underlying conditions may justify either position from a speculative point of view. And if the personal situation of the holder of either bonds or cotton contracts is such that each offsets another hazard, either may be regarded as a pure investment or insurance against loss, but

in the absence of such a balanced situation they are both speculative in nature.

Thus it has happened that an individual's investment in bonds of the highest credit rating in 1902 has proved progressively an unfortunate speculation in terms of the cost of living throughout the intervening years, because each year, with but few exceptions, the dollar has lost in purchasing power.

True — if, as many believe (though some do not), the cost of living may be counted on, in the years ahead, continuously to fall, then the holders of bonds may expect to profit progressively at the expense of the issuing companies. It must not be overlooked, however, that long-term movements in the general price level constitute as much of a speculation for corporations issuing bonds as they do for bondholders. A long-term fall in commodity prices results for many heavily bonded corporations in an increasing difficulty to make adequate margins of profit out of which to meet interest payments and set aside reserves for the retirement of their bonds as they mature. As a consequence, our longest period of falling prices culminated in a period of high mortality among heavily bonded corporations (1893-1896). It is one thing for corporations to refund a bond issue when, through depreciating currency, the replacement value (in dollars) of the properties which are pledged as security is greater than their original cost, and quite another when conditions are reversed. Hence, if falling prices are to be expected, investors must exercise greater care in appraising the credit risk of bond-issuing corporations than has been needed in the past quarter-century.

A protracted falling in the general price level has been accompanied, in the past, by a reduction in the general

level of interest rates. Such a movement in the future would be to the marked advantage of bondholders at the expense of the issuing corporations, as it would be accompanied by a rise in the price at which bonds could be sold on the open market. Thus an investor, buying a bond on a five to six per cent yield basis, might expect to make a handsome profit if he foresaw a fall in general interest rates justifying a future market for the bond on a yield basis of from three to four per cent. Such a tendency in the general interest level is not at present beyond reasonable expectation. In any event, its possibility has been foreseen by a majority of corporations which have floated bond issues in recent years. As a result of sound financial counsel, practically all recent issues contain a clause under which the company retains the right to redeem its bonds at a slight premium over par. This provision is wise from the point of view of the issuing company, as it serves to limit the speculative advantage which a holder of its bonds may obtain at the company's expense, if underlying conditions turn definitely in favor of the holder and against the company. It serves, in the language of the Street, as a 'stop-loss order,' in favor of the company, in connection with the long-term speculation in general prices which the company enters into with the holders of its long-term bonds.

There are, however, comparatively few bonds containing a provision by which the holder may convert the bond into common stock, should future conditions tend definitely in favor of the company at the expense of the bondholder. In the absence of such provisions, the bondholder must suffer the full losses entailed in continuously rising prices accompanied by a rise in general interest rates. No 'stop-loss

order' has been placed on his behalf.

The great market to-day for bonds, and the market in which speculation is eliminated, is to be found in savings banks, insurance companies, and other financial institutions. These institutions render services of extraordinary value to the community. Their business consists of creating dollar commitments. Their safest form of investment is consequently in bonds and other dollar obligations. It follows that there is a very great and, at present, a very rapidly expanding market for bonds of the highest credit standing, without conversion privileges—a market that it will be hard for bond-issuing corporations to satisfy.

Thus no present need exists for corporations to depart from their present practice of protecting themselves against too marked a future change in price level and general interest rates while giving their bondholders no equivalent protection. The greatest buyers of bonds already have such protection in the very nature of their business.

But individuals or estates whose investments are made with the happiness and comfort of families as their object, or educational and charitable institutions whose endowments are invested to assist in defraying operating expenses at whatever price level may prevail in future years, should ponder well the form of security in which their funds are invested, should carefully consider the effect of possible changes in fundamental conditions upon the relation of future income to future outgo. The only means by which such investors may avoid speculation is through the neutralization of unavoidable hazards, by diversification, and through establishing a true balance between the nature of their future commitments and the nature of their investment holdings.

THE TURKISH STATE OF MIND

BY ARNOLD J. TOYNBEE

I

THE present state of mind of the Turks is revolutionary. This feature of it must have struck every foreign observer who has visited Angora within the past five or six years (as the present writer visited it in April 1923, during the interval between the first and second phases of the Lausanne Conference). In this improvised seat of government in the drowsy interior of Anatolia, the hum and stir of revolution is unmistakable. The place is alive with that demoniac energy — part defensive and part constructive — which is awakened in bees when their hive is disturbed or in ants when some intruder places a clumsy foot upon the ant's nest. In this atmosphere you are conscious of the France of 1793 and of all the revolutions between that date and this in the Old World and the New. The men of Angora are themselves consciously inspired by the French Revolutionary ideas of a century ago; and formulæ which to contemporary Frenchmen seem platitudes or fallacies are to them exciting and dynamic verities.

A closer inspection, however, reveals that this is not an 'evolutionary revolution' (if such an apparently contradictory expression may be allowed). Most of the famous revolutions of history have been revolutionary only on the surface. Superficially, there has been an explosion, and a violent breach with the past; but, deeper down, the changes thus suddenly made manifest have

usually been maturing for generations past, and the revolutionary symptoms which fill the foreground at short range fade away, on a larger view, into a hardly perceptible acceleration of a continuous development. Such were the English, American, and French Revolutions of the seventeenth and eighteenth centuries. In the last analysis, the changes which they introduced were all stages in a single line of advance. The Turkish Revolution, on the other hand, is revolutionary through and through. The very consciousness of French precedent and inspiration is due to the fact that whatever is French, or indeed whatever is Western, is ipso facto not the Turk's natural background and therefore is not something which the Turk can take for granted. The true parallels to the present Turkish Revolution are not the historic revolutions in England, America, and France — which, after all, were family affairs within the bosom of Western society — but those spiritual conversions, those abandonments of one civilization or way of life and adoptions of another, of which the most familiar modern examples are the 'Westernization' of Russia by Peter the Great and of the Greek nation by the Greeks themselves in the eighteenth century, and of Japan in the nineteenth century by the deliberate act of a few Japanese statesmen.

The best way to realize the greatness of the mental change involved is to

remind ourselves of the mental background and outlook of an educated Turk in, say, 1525, when Suleiman the Magnificent was on the eve of conquering Hungary and laying siege to Vienna. Let us imagine ourselves face to face with one of Suleiman's ministers of state or high military officers or provincial governors-general. In 1525 these coveted posts were not to be had by influence or intrigue, still less by the possession of a Parisian accent or a Western education. They could be won only by going through the mill of an intensive and intensely competitive education, which began at the age of seven (when the candidates were torn away from their families, as Plato proposed to do with the children who were to be trained as guardians of his ideal Republic) and which ended at about the age of twenty in the case of those who had not in the meantime been rejected as unfit for the highest posts and been assigned to some inferior branch of the military and civil services.

The training given during this long course was extremely varied. At an early stage the boys were attached to the households of Turkish feudal squires in Asia Minor, in order that their character and physique might be developed by working on the land. Later they were collected in the military academies of the capital, where they led a corporate life under iron discipline and were given as thorough an education in classical literature as in the arts of war and government. At every stage the system was vigorously selective and competitive. In this and in its austerity it resembled the educational system of ancient Sparta; but the Osmanli, unlike the Spartan, lawgiver made use of the financial incentive by rewarding efficiency with increased rates of pay, and he did not overvalue the body in comparison with the mind. Indeed, in his

respect for literary education he came nearer to the liberalized version of the Spartan system which was conceived by Plato; and there is some irony in the fact — which is a sober truth and not a paradox — that the education given by the Ottoman Government to the 'tribute-children' taken from the subject Christians (the source from which the rulers of the Ottoman Empire at this time were drawn) was the nearest approximation to Plato's ideal that has ever yet been actually realized on Greek soil.

There was nothing Greek, however, about the origin of these Turkish institutions, remarkable though their analogies with the Platonic Republic and with Sparta were. This system of training, which in its zenith made the Ottoman Empire the most efficient and therefore the most powerful state in the world, was brought, by the founders of the empire, from the distant steppes of Central Asia, where the composite nomadic communities of men, horses, dogs, and cattle could not survive a single season unless all their members, human and animal, were sternly trained from infancy to perform their several functions in coöperation. Again, the literary education with which the wisdom of the Osmanli lawgiver had supplemented the simple training of the steppes, in order to fit the descendants of the nomad conquerors to hold their own in a more complicated environment, was not based on the ancient languages of Greece or Rome or on the contemporary vernaculars of Western Europe. It was a study of the Arabic and Persian classics and of the Islamic culture which they embodied — a culture which, it is true, had many points of contact with that of the West, but which in essence had followed a separate line of growth since either had emerged from the débris of Hellenism.

This training — created by the blending of several historical experiences, but to which little or nothing had been contributed by the experience of either Oriental or Western Christendom — led the Ottoman governing class of the sixteenth century to look down, with a sense of superiority tempered by detachment, upon the Oriental Christian peasants over whom they ruled and upon the Western Christian merchants whom they admitted, on sufferance, as strangers within their gates. The peasants were known as *Ra'iqyat*, or 'human cattle,' — a term which the Osmanlis borrowed from the Arab conquerors of the first age of Islam, just as the present British rulers of India have borrowed it, in the garbled form of 'Ryot,' from the Osmanlis' kinsmen, the Mughals, — and the Osmanli rulers felt toward them much as their forefathers had felt toward the real cattle on which their nomadic livelihood had depended. They were to be protected by the Pax Ottomanica from being raided by the owners of neighboring herds, and in season they were to be milked and shorn by their lords and masters. Otherwise they might go their own way and graze at will. As for the Western traders whose settlements were tolerated at a few points in the Ottoman Empire, such as Constantinople, Smyrna, Aleppo, and Alexandria, the sixteenth-century Osmanli regarded them as the nomad regards the sedentary hucksters and craftsmen in the rare oases which break the uniformity of his pasture lands — a despicable but not a dangerous people, who know how to produce those few commodities which the nomad cannot make for himself in his otherwise self-contained mode of existence, and with whom intercourse is therefore to be maintained, though on very distant terms.

It will be seen that three hundred

years ago — and three centuries is not a long period in the history of a community — the Western inspiration, which to-day is the dynamic force in the life of the Turkish ruling class, played no part in their life at all. The only common ground between Osmanlis and Westerners at that date was in the art of war, in which new inventions are always borrowed more rapidly than in other departments of social life, because the penalty for not borrowing them is political extinction; and here the Osmanlis gave to the West at least as much as they took from her. They borrowed the artillery with which they breached the walls of Constantinople and overthrew the cavalry of Shah Isma'il and the Mamluks. They gave to Europe, though they started as an equestrian people, the first regular infantry which she had known since the disappearance of the Roman legions. Their influence upon the military development of the West can be traced in the uniforms of eighteenth and nineteenth century Western armies and in a number of exotic military terms, like 'Uhlan,' 'dolman,' or 'shako.' The monuments of their military ascendancy can be seen in a museum — once the Byzantine Church of St. Irene — within the precincts of the Sultan's palace in Stamboul, where morions, breasts-and-backs, halberds, arquebuses, and all the other equipment with which our Western ancestors went forth to war in the sixteenth and seventeenth centuries can be seen to this day, piled up in amazing profusion, as trophies of battles in which the Osmanli (whose spoils of this date are not so common in Western museums) had proved himself the better fighting man.

II

Let us now pass over two centuries and a half and look at the rulers of the

Ottoman Empire in 1774, when the most momentous of the many Russo-Turkish wars had been concluded by the signature of an ignominious peace treaty. By this date the Ottoman institutions had grievously broken down — the ban upon the inheritance of honors and position, which had been the necessary corollary of a scientific selection and training of rulers, having proved too difficult for human nature — and the day of the Ottoman Empire had departed. The Osmanlis had been utterly beaten, on land and sea, by one Christian Power single-handed — and that not by any Power of the West, that fragment of Christendom which the Osmanlis had never succeeded in conquering, but by an Oriental Christian people, the coreligionists of the Osmanli's despised Oriental Christian 'cattle' and themselves not long ago the 'cattle' of the Osmanli's Tatar cousins on the Volga. By what arts had these Russian 'cattle' learned to defeat their traditional masters? This was the question which exercised every intelligent and patriotic Turk during the next generation, and there was no doubt about the true answer. The Russians had secured their triumph of 1774 because, for almost a century before that, they had been deliberately discarding their old barbaric methods of warfare and had been industriously adopting the methods of the West, which, since the day of Suleiman the Magnificent, had been imperceptibly but steadily forging ahead of the Ottoman Empire in the arts of war and peace alike. In the war of 1768-1774, the Osmanlis had been defeated not so much by the Russians as by the new Western weapons and tactics in Russian hands; and if they were to save the remnants of their Empire — now threatened on three sides by the Russians established on the Black Sea coast, by the Austrians pressing down

the Danube, and by the French and English who had succeeded the Spaniards and Osmanlis as rival aspirants to the naval command of the Mediterranean — their only hope was to follow the Russian example. This gives the key to Turkish history from the signature of the Russo-Turkish peace treaty of Küçük Kainarja in 1774 down to that of the Armistice of Mudros on October 30, 1918.

During this period of nearly a century and a half, which terminated less than seven years ago, there were perpetual attempts in Turkey at 'reform' on Western lines, but these attempts were uniformly unsuccessful owing to certain fatal limitations in the mental standpoint from which they were made. All this time, the Turks were concentrating their efforts upon preserving the old bottles from which the old wine had long ago evaporated or leaked away; and, as if this misdirection of energy were not enough in itself to carry them further along the road to ruin, they attempted — of all methods! — to accomplish their object by pouring in successive doses of new wine! Almost all the Turkish 'reformers' of this period, from Sultans Selim III and Mahmud II at the beginning of it down to the founders of the Committee of Union and Progress at the end, were inspired by the same idea of adopting the new Western military technique in order to save the remaining institutions and the remaining territories of the old Ottoman Empire.

Inevitably, of course, the reforms spread beyond the strictly military sphere, since the maintenance of an army on the modern Western model is so expensive and so intricate a business that it demands certain standards of finance, hygiene, and higher education. Accordingly the building-up of a Westernized Turkish Army carried with it the development of Western schools of

medicine, law, and diplomacy — since, now that the Western Powers had the upper hand, it was necessary for the Turks to treat with them continually on equal or inferior terms instead of from time to time dictating conditions of peace. There were also one or two notable reformers who had a larger vision — for example, Midhat Pasha, whose career fell within the twenty years between the Crimean War and the accession of Abdul-Hamid, when the Ottoman Empire, temporarily relieved from the Russian menace and stimulated by her close association with the two most liberal of the West European Powers, had a better chance than either before or after of making the new wine and the old bottles agree together.

Midhat Pasha laid emphasis, not upon the Westernization of the Army, but upon that of the civil administration and the higher educational system; but even he was aiming at an impossible objective. He aspired, by these deeper reforms, to reconcile the non-Turkish elements in the Empire and to make loyal citizens out of seditious subject populations, and his best work was devoted — and therefore given in vain — to those then Ottoman provinces which now constitute the independent national states of Bulgaria and Iraq. He did not realize that you could not introduce some ingredients of the new wine into the old bottles without the remainder, and that this remainder included the idea of nationality — a fundamental principle of modern Western society which was bound, as it fermented in the cracked and perished tissues of the Ottoman Empire, to disrupt them sooner or later. The last act in his career — in which the veteran liberal statesman was outmaneuvered by the new Sultan, Abdul-Hamid, with his autocratic ideals — was to attempt the

introduction of constitutional government, with a parliament composed of Greek and Serb and Bulgar deputies from Rumelia, Arab deputies from Syria, Iraq, and the Yemen, Bedawi deputies from the desert fringes, and Albanian and Kurdish deputies from the untamed mountains, as well as Turkish deputies from the homelands of the Osmanli Turkish people in Anatolia, Thrace, and Constantinople. He did not face the fact — though it stared him in the face in the history of a generation of political fiascos in the new Oriental Christian states of Greece and Serbia — that to introduce the highly specialized and exotic political institutions of the West into a non-Western state, even when it contained a nationally more or less homogeneous population, was a task almost too difficult for statesmanship to accomplish, and that, *a fortiori*, it was a sheer impossibility in an empire compounded of discordant nationalities with nothing in common in their political traditions except the adverse fact that Western institutions were equally alien to them all. Midhat's constitution would have perished even if Abdul-Hamid had not extinguished it in anticipation of its natural term; yet the Turkish reformers learned so little during the generation that followed Midhat's failure that the first act of the Committee of Union and Progress, when they overthrew the Hamidian autocracy in 1908, was to reinstate the constitution of 1876 and summon all the conflicting nationalities of the Empire once more to coöperate in a common parliamentary government as loyal Ottoman citizens.

The failure of the C. U. P. between 1908 and 1918 was more signal than Midhat's failure had been a generation earlier — partly because an unkind Fate gave them the time to carry their impossible experiment to its inevitably

disastrous conclusion, and partly because they had inherited Midhat's programme without his liberality of mind. When the non-Turkish nationalities of the Empire — themselves inspired by those Western influences which were now in flood tide — omitted to fall in with the policy of 'Ottomanization' and continued, as was only natural and human in the circumstances, to concentrate their hopes and efforts upon their own national self-development, the 'Young Turks' attempted to coerce them by those 'methods of barbarism' by which Mahmud II had disposed of the Janissaries and Mehmed 'Ali of the Mamluks. This reckless and reactionary policy steered the Ottoman Empire straight upon the rocks, where the hulk, battered by the storms of centuries, was dashed to pieces in the tempests of the Balkan War of 1912-13 and the Great War of 1914-18. By their programme of forcible Ottomanization the C. U. P. contrived not only to drive their remaining Christian subjects in the Balkan Peninsula to desperation, and so to call into existence a hostile coalition of the independent Balkan States, but also to alienate the Albanians, Kurds, Arabs, and other non-Turkish Muslim peoples of the Empire, who, but for this provocation, might not have been awakened to national consciousness for many years to come. Thus, while the Balkan War deprived Turkey of her last European provinces except the Thracian hinterland of Constantinople, the Great War deprived her of Arab and Kurdish provinces which in extent — though not in cultivable area or population — represented fully half of what had been Turkey-in-Asia. The Armistice signed at Mudros on October 30, 1918, placed the Allied Navies, including the Greek Navy, in command of the Straits and Constantinople, and the Allied Armies, under General Allenby, in command of

the passes leading from Syria into Anatolia, while the Turkish forces which had survived General Allenby's crowning victory were to be demobilized and disarmed by Interallied control officers. The Ottoman Empire was unmistakably *in articulo mortis*. At that moment no one — and perhaps least of all the Turks themselves — suspected that the Turkish national state was on the eve of being born.

III

In reality, the situation created by the outcome of the Great War was more favorable to the Turkish people, as opposed to the Ottoman Empire, than any in which they had found themselves since they had abandoned their ancestral institutions and their glory had departed from them. To begin with, the Ottoman Empire was not the only empire which had foundered in the storm. The Russian Empire, which had been its most formidable enemy for a century and a half, had gone down with it and had been replaced by a strange new Power which was fighting desperately for its existence against the surviving Powers of the Entente, and which was therefore ready to make common cause with any enemies of the Tsardom or of Great Britain and France. Again, the German *Reich*, whose friendship had been only less dangerous to Turkey than the Russian Empire's enmity, was paralyzed by defeat, and the Germans who had installed themselves in Turkey during the war were now expelled by the victors. Finally, the victors themselves, for all their apparent omnipotence, were exhausted by the war, in the last phase of which they had been on the verge of defeat, and were concentrating their energies on imposing the severest possible peace-terms upon their principal opponent, Germany.

For all the Principal Allies, Turkey was a quite secondary concern, and they followed the line of least resistance in making Greece, who had local national aspirations to satisfy, their bailiff and executioner in Thrace and Anatolia. Greece, however, with her limited resources and her fatal internal factions, proved a broken reed; while the Principal Allies, apart from their preoccupations in other fields, were inhibited by their long-standing mutual rivalries in the Levant from effectively supporting either Greece or one another. Thus, from the moment of the Armistice of October 1918, the Turks found themselves relieved of most of their former enemies and reinforced by new allies, the Bolsheviks, in an unexpected quarter. Yet these changes in the external situation, favorable though they were, would have brought little profit to Turkey if there had not been a simultaneous change in the position and outlook of the Turks themselves.

As far as their position was concerned, they were at last completely relieved, through the good offices of their enemies, of the incubus of the Ottoman Empire. The non-Turkish provinces and populations, which in the sixteenth century had provided the necessary ways and means for the selection, training, and maintenance of the ruling Osmanli *corps d'élite*, had become nothing but a burden to the Turkish people since the old institutions had broken down. For centuries they had exhausted their energies in the unprofitable attempt to hold these alien provinces to their allegiance, and now at last this barren chapter in their history was closed. Simultaneously — and this was a feature of the utmost importance — the attitude of the Turks toward the Ottoman Empire was transformed. With the Interallied occupation of the Straits, in November 1918, and the Greek occupation of

Smyrna in the following May, the homelands of the Ottoman Turkish people in Thrace and Anatolia were seriously threatened for the first time in their history since the transitory invasion of Timur the Great at the beginning of the fifteenth century; and therewith that Western-inspired consciousness of nationality, which had come to life a century earlier in the subject Greeks and Serbs, was suddenly awakened in the hitherto imperially minded Turks. The shock of finding their homelands in danger dissipated finally from their minds the disastrous ambition to maintain their rule over other peoples.

The programme of the new Turkish national movement which was thus quickened to consciousness by the landing of the Greeks at Smyrna on May 16, 1919, was first formulated in the celebrated Turkish 'National Pact' or solemn league and covenant of 1920. In this short but pithy document, the striking feature — particularly when the Pact is compared with the programmes of previous Turkish reformers — is the sober renunciation of claims and the rigid limitation of objectives. Implicitly the European provinces west of Thrace, and explicitly the Arab provinces south of the Armistice line of October 30, 1918, are abandoned; and the Turkish energies thus released are concentrated, first, upon preserving the integral possession of Thrace, Anatolia, and Constantinople for the Turkish nation, and secondly upon making the nation mistress of its own house within these national limits.

The new Nationalists, led by Mustafa Kemal Bey, had thus learned a lesson which had never been learned by Mahmud II or by Abdul-Hamid or by the Committee of Union and Progress; for these earlier reformers had all been led astray by grandiose visions before they had set their own house in

order. Mahmud had spent his energies in vain attempts to reconquer Greece and to bring Mehmed 'Ali to heel in Egypt. Abdul-Hamid, when his own empire was threatened with partition, busied himself with reviving the doubtful and contested title of the Ottoman Dynasty to the Caliphate — that is, to the political, not the spiritual, headship of the Sunni Muslim community throughout the world — a claim which was bound to get him into trouble with all colonial Powers, including those which were otherwise not unfriendly to Turkey, like the British Empire. Again, the Committee of Union and Progress, though they were determined to prevent the Sultan from recovering the autocratic power of which they deprived him in the revolution of 1908, had not the strength of mind to forgo the shadowy prestige of the Caliphate, although the traditional prerogatives of the Caliphate according to Islamic canon law were irreconcilable with the limitations of constitutional monarchy on the Western model. They still attempted to represent the Ottoman Sultan, whom they had made their puppet at home, as the true Commander of the Faithful in the eyes of Muslims in *partibus infidelium*. Not content with promoting Pan-Islamism in this and other forms (though they personally were mostly Western-educated agnostics), they were inspired by reading the works of a Western historian, M. Léon Cahun, to take up 'Pan-Turanianism' — a sort of doctrinaire supernationalism which aimed at a rapprochement between the various Turkish-speaking peoples scattered through the length and breadth of Europe and Asia from Yakutsk to Constantinople and from the Urals to the Tian-Shan.

By contrast, the new Turkish Nationalists have shown the comparative soundness of their political judgment

in steadily refusing to have anything to do with either of these forms of megalomania. They realized at once that Pan-Turanianism would lose them the support of Soviet Russia, since nearly all the Turks in the world outside the borders of Turkey are to be found in the territories of the Union of Socialist Soviet Republics; and that Pan-Islamism, while equally calculated to alienate them from Soviet Russia, would also prevent an ultimate reconciliation with Great Britain and France, who were the two Powers with the largest number of Muslim subjects in the world. The attitude of the new Turkish Nationalists on these questions — an attitude which the present writer has ascertained in personal conversation with some of their leaders — is quite clear. 'For centuries,' they say, 'we have been fighting the battles of Islam and forgetting our own national development. Why should we sacrifice ourselves any longer? We have vindicated our national independence against tremendous odds and at a terrible cost in the war of 1919-1922. If other Muslim peoples prize liberty as highly as we, let them go and do likewise. We waged and won our national war of independence single-handed. Now that we have made favorable treaties, not only with Soviet Russia but with Great Britain, France, Italy, and the United States, what obligation have we to embroil ourselves again with our powerful neighbors in order to help the Arabs (who, after all, threw us over in 1915) to throw off the tutelage of the Mandatory Powers, or in order to help our Azerbaijani or Bashkir Turkish kinsmen (who, after all, possess autonomy within the Union of Socialist Soviet Republics) to secede from the federation to which they now belong? Let them mind their business and let us mind ours.'

This feature in the present Turkish state of mind is important and encouraging, for it means that the new Turkey will be ready to live and let live as a good citizen of international society. It is true that there is one serious territorial issue still outstanding in the Turco-British controversy over the Mosul Vilayet. The genesis of this controversy lies in the fact that the Turks, after renouncing their claim to dominion over the Arabs, had not the strength of mind to carry this policy to its logical conclusion by also renouncing their ambition to assimilate the Kurds. Sooner or later this attempt, which will break down as soon as the spirit of nationalism catches the Kurds in their turn, will involve the Turks in fresh misfortunes. Meanwhile the Mosul controversy, serious though it is, has been reduced to the dimensions of a boundary-dispute which is in a fair way to being settled by the intermediation of the Council of the League of Nations.

IV

While, however, the Turks, under their present leadership, have taken on the whole a moderate view of what their national domain should be, they have been adamant in insisting that their territorial claims were an irreducible minimum; and, having obtained these claims in full, — an achievement of which not many contemporary nations can boast, — they have been no less adamant in asserting their mastery within their frontiers.

In order to understand the internal policy of Kemal Pasha and his party — a policy which has gradually taken precedence over their military and territorial aims as these have been progressively realized — it is necessary to grasp that, for the Turks of to-day, the dominating question is one of status. The Turks, like the Jews, have

been, since they first made contact with the West, a 'peculiar people'; and while this is an enviable position so long as you are 'top-dog,' with a status like the Spartan's in ancient Lacedaemon or the English Sahib's in modern India, it becomes an intolerable humiliation as soon as the rôles are reversed. The Pharisee would hardly have thanked God for being not as other men were if Pharisees in the circle where he belonged had been labeled 'unspeakable.' He would have prayed to be made indistinguishable from the publicans and the Gentiles, and this is the state of mind at which the Turks have arrived to-day, though three centuries ago their attitude toward the infidels of the West was much the same as that of the Pharisees in the parable. From despising the West they have passed, first to a lukewarm willingness to adopt the minimum amount of Western technique which might be necessary to salvation in this world, and finally to a passionate desire to be admitted as full members of Western society in order to escape from the terrible position of being its pariahs. In this respect the psychological similarity between the new Turkish Nationalism and the Zionist Movement is unmistakable. In both cases the status of a 'peculiar people' has ceased to be a source of pride and has become a source of humiliation; and in both cases, therefore, a strong movement has arisen to escape from it.

It remains to review briefly the various fields in which the Turks have been putting their new policy of 'normalcy' (on a Western norm) into practice during the three years since their victory over the Greeks set their hands free for internal reform. They have attempted systematically to Westernize their relations with resident aliens, with non-Turkish minorities, and with one another.

The social, juridical, and economic position of aliens in Turkey has been assimilated to their position in Western countries by the abolition of the Capitulations—an abolition which was provided for in the two treaties signed by the Turkish Government at Lausanne in 1923, one with the Allies and the other with the United States. In virtue of the Capitulations, the foreign communities in Turkey had lived under the extraterritorial jurisdiction of their own diplomatic and consular authorities, had enjoyed immunity from many Ottoman taxes, and had been privileged to import and export goods at tariffs fixed by treaty, which the Ottoman Government had no power to alter unilaterally.

In the sixteenth century, when the first Capitulations were granted to Western traders by Ottoman Sultans, the proportion borne by their trade to the total trade of the Ottoman Empire was so small, and their home governments were so weak, militarily and even navally, in comparison with the Porte, that these privileges were of no consequence. The Sultans then tolerated the presence of these Westerners in their dominions, but could not be bothered to administer them. Three centuries later, when Western commercial interests had become the chief economic forces in Turkey and when the private representatives of these interests had the backing of Governments which held the Ottoman Empire at their mercy, the Capitulations had come to exercise a strangle-hold over the economic life of the country. The insistence of the Turks upon abolishing them is therefore not only natural but legitimate, though the suddenness of the change—due to the fact that the Turkish Revolution has come about precipitately, as the result of war—has imposed hardships upon individuals and may also have given a temporary

setback to the economic development of Turkey by causing some valuable foreign concerns to go out of business.

The second problem with which the Turks have had to deal is that of the non-Turkish minorities—those former 'cattle' of the old Osmanli ruling class to whom the latter, in their contemptuous aloofness, had granted an autonomy not unlike that which they had granted to the foreign Western trading communities. So long as these minorities—or, rather, subject majorities, as they were before the bulk of them separated from Turkey through the secession of the Balkan States—duly paid their tribute in children and money and kind, it mattered little to their rulers how they managed their own communal affairs. If a Greek wanted to go to law with a Greek or a Jew with a Jew, let the bishop and the rabbi see to it. Why trouble the kadi? Here, again, privileges which had been granted with impunity in the sixteenth century had become excessively dangerous when these autonomous non-Turkish communities within the Ottoman Empire possessed independent states of their own nationality to look to, to which they ardently desired to secede, and when their political aspirations were supported by the sympathy of the great nations of the West.

The situation was further complicated by the fact that—as often happens where several communities of unequal political status are intermingled territorially—the different nationalities of the Ottoman Empire had become identified to a large extent with different classes and occupations. While the Turks formed the majority of the agricultural population in their own homelands, monopolized the higher ranks of the civil administration and the army throughout the Empire, and shared with the other Muslim

elements the burden of compulsory military service, the Greeks, Armenians, and Jews — relieved of military service by the easy alternative of an exemption tax — devoted themselves to trade and industry, and made their position in these callings so strong that the Turks, with more honored and less arduous professions open to them, left these fields virtually uncontested to their non-Turkish fellow-citizens. The political and economic dangers of this state of affairs — which were both accentuated during the Greek occupation of Western Anatolia in 1919-1922, when the local Greek minority naturally took sides with their invading kinsmen — so deeply impressed the Turkish Nationalists that, in the National Pact of 1920, they declared their intention of reducing the privileges of the non-Turkish minorities to the level (though not below the level) of the much more modest rights which had been secured to minorities in the newly created or enlarged states in Europe, under the treaties for the protection of minorities which the Governments of these states had recently signed at the instance of the Principal Allied and Associated Powers. This formula was eventually embodied in the Peace Treaty of Lausanne, and thereby the juridical assimilation of the status of minorities in Turkey to their status in Europe was brought about.

In the meantime, however, the problem had been solved much more drastically in practice by the flight or expulsion of the minorities from all the Anatolian and Thracian territories which the Turks recovered in 1922, except for Greeks domiciled bona fide in Constantinople. This exodus — with its counterpart in the exodus of the Turkish minority from the Greek territories in Macedonia — is unparalleled in its scale and has been

accompanied by an appalling amount of material loss and human suffering; but here, again, the process of Westernization can be seen at work. In the summer of 1922, Western Turkey and Northern Greece were still countries of mixed nationality, like carpets woven on an Oriental pattern. To-day, they are both almost as homogeneous as Italy or France or England; and these new homogeneous national states may possibly succeed in establishing genuine parliamentary government on Western lines where the attempt was altogether beyond the powers of those mixed multitudes which occupied the same territories a few years ago.

V

The most radical, and the most interesting, of the changes introduced by the Nationalists are those affecting the political, social, and economic life of the Turkish nation itself.

Their first political act after the signature of the Mudania Armistice in the autumn of 1922 was to abolish the Ottoman Sultanate and vest the sovereignty of Turkey in the Great National Assembly at Angora. This marked, juridically, the end of an empire which had been so completely the creation of the Ottoman Dynasty that it bore the Dynasty's name, and the substitution for it, in the homelands of the Osmanli Turkish people, of a Turkish Republic. By this act the Turks — who had suffered from the existence of the Ottoman Empire as acutely, in their way, as the non-Turkish nationalities — were at length liberated from it as the Serbs, Greeks, Rumans, Bulgars, and Albanians had been liberated by the successive foundation of their respective national states in the course of the preceding century — *L'Empire Ottoman est mort; vive la Turquie!*

This abolition of the Sultanate is advantageous to Turkey from three points of view. In the first place, as has just been explained, it is a symbol that the Turkish State exists, at least in intention, for the benefit not of a dynasty but of the Turkish people. In old times, the Turkish budget was one of the smallest and the Ottoman Sultan's civil list conspicuously the largest in Europe. Now — and here lies the second advantage — this unremunerative expense has been cut away; and at the same time the Angora Government has closed the overstuffed and lavishly equipped public offices in Stamboul, which had served the administration of a great empire, and has substituted for them new public offices at Angora, improvised on the modest scale suitable for a young national state. In addition to this financial saving, there is a third advantage of a political order. In non-Western countries seeking to adjust themselves to Western civilization, the presence of an old established native dynasty has invariably proved a source of weakness. In Persia, Morocco, and elsewhere, native autocrats have proved ready to place themselves at the disposal of foreign Governments in order to obtain the support of those Governments for the maintenance of their traditional authority over their subjects; and, in Turkey itself, both the Committee of Union and Progress and the present Nationalists have had disagreeable experiences of the kind in recent years. Abdul-Hamid, after accepting the Constitution at the sword's point in 1908, almost succeeded in recovering his despotic authority by force in 1909; and though, since that time, the de facto rulers of Turkey have invariably been careful to keep a nonentity on the throne, they, rightly or wrongly, accuse the late Sultan, Vahydu'd Din Efendi, of having worked against the Turkish

Nationalists on behalf of the Allies, deliberately and not under duress, during the Allied Occupation of Constantinople in 1918-1923. The abolition of the Sultanate reassures the Turkish mind that this breach in the solidarity of the national defenses will never be opened again.

A much more revolutionary act has been the abolition of the Caliphate and the disestablishment of the Islamic Church — an act which has made the Turkish Republic an *état laïque* like the United States or France. In this connection it is important to note that the exploitation of the title of Caliph is of recent date, though the Ottoman Dynasty had laid claim to it ever since it first rose to greatness, while the same title was likewise assumed, with as much or as little legitimacy, by the Mughal Emperors of India and by most other prominent Islamic dynasties in modern times. By tradition the Caliph is the temporal, not the spiritual, ruler of all True Believers — the Roman Emperor (or Holy Roman Emperor), not the Pope, of the Islamic World. Accordingly, when the Ottoman Empire was at its zenith, the title was of little value to its sovereigns, since they already bore effective temporal rule over their own Muslim subjects as Ottoman Padishahs, while any claim on their part to exercise authority over the subjects of other Muslim sovereigns would not have been admitted by the latter. The situation changed when almost every other independent Islamic Empire disappeared, when the Ottoman Empire itself lost one province after another, containing Muslim populations, to Christian Powers, and when Turks educated in the West imbibed the specifically Western doctrine of the distinction of temporal and spiritual powers.

These changes suggested the new policy of misrepresenting the Ottoman

Caliph as a spiritual authority analogous to the Christian Pope, and asserting his right to the spiritual allegiance, not only of his Muslim ex-subjects in the lost provinces of the Ottoman Empire, but of the former Muslim subjects of defunct Islamic Empires, like the Mughal Empire in India, or the Muslim subjects of non-Muslim Powers like China or the Netherlands. This was the policy of Abdul-Hamid, which the Committee of Union and Progress attempted to carry on; and even the Nationalists, when they abolished the Sultanate in 1922, at first set out to maintain the Caliphate as a separate and exclusively 'spiritual' office vested in a member of the deposed Ottoman Dynasty. A Pope, however, is an awkward guest for a sovereign national state, and the Turkish experiment of maintaining the Caliph as Pope was abandoned after little more than a year's trial. Who shall say that the Turks were not wise in these second thoughts?

These are the principal political changes which the Turkish Nationalists have introduced in three years, and even this brief account will show how much more profound this Turkish revolution is than any which we Westerners have experienced — at any rate, since our revolutionary conversion to an Oriental religion some thirteen centuries ago. The policy of Mustafa Kemal Pasha's Government can only be judged by time, and then, possibly, it will be judged less on its political results than on its social and economic results, which are the ultimate object of policy. In the social and economic sphere there are three main developments to watch: the movement for the emancipation of women; the movement for the modernization of agriculture; and the movement for the entry of individual Turks into trade and manufacture, in place of the vanished non-Turkish minorities. On the success of these three movements the future of the new Turkey depends.

THE STRUGGLE FOR COTTON

BY EVANS LEWIN

I

THE fight for raw materials is one of the outstanding features of modern civilization. European nations are almost wholly dependent upon the tropics for many of the essential products used in their manufactures, such as cotton, vegetable oils, rubber, and a host of lesser commodities that cannot be produced in temperate climates. Although the territorial control of large supplies

of raw materials is not essential to the welfare of great industrial communities, it has long been recognized that it is extremely desirable that manufacturers should not be entirely dependent upon the grace of foreign countries for the supplies that are required for the industrial machine. For this reason most of the manufacturing nations of Europe have endeavored to

secure a territorial hold upon countries of production, so that in the struggle for industrial supremacy, or at least for industrial efficiency, they shall be partly independent of foreign sources of supply. Great Britain, France, Germany, Italy, Belgium, Holland, Spain, and Portugal have all in turn established plantation colonies, sometimes under the disguise of philanthropic effort, sometimes for the purpose of strategic defense, sometimes merely as calling-stations for their ships; but in all cases these establishments have sooner or later become valuable sources of supply and their value has increased in proportion to the advance in the industrial efficiency of the mother-country.

It is evident that, while plantation colonies are not absolutely necessary, — the case of Germany, which at present has no colonies, and of Czechoslovakia, whose industries have vastly increased since the war, may be cited, — there is an almost inherent tendency among democratic communities to hold what they have and to develop their overseas colonial possessions to the best of their ability.

Great Britain is in a peculiarly fortunate position as a plantation power. She possesses vast tropical estates capable of almost indefinite development, supplying many of the essential products consumed by her manufactures, and contributing directly to her prosperity both as producers and consumers. In the proper development and effective administration of these great territories her own prosperity and that of their native races are directly involved, and the great economic problem of the present age, the production of raw materials, is intimately associated with a number of questions with which the whole world is indirectly concerned. Within the British Empire there are certain products of which the British

Commonwealth has almost a monopoly; but there are others the supplies of which lie mainly outside British territory. The United Kingdom considered by itself is mainly dependent upon overseas sources for the raw materials of commerce, while in the matter of foodstuffs for the industrial population of the British Isles great quantities also have to be imported. It is essential, therefore, for her prosperity that she should be able to secure ample supplies at reasonable prices so that there shall be no stoppage of the industrial machine. One of the main products upon which a very large section of her population depends for its livelihood is cotton, and in this product the British Empire as a whole is singularly lacking and is mainly dependent upon the United States. The United States, on the other hand, although she possesses a vast and compact territory, is entirely deficient in rubber, jute, silk, and certain important vegetable oils; so that, like the United Kingdom, she has to import certain commodities over which she has no territorial control. For this reason, and also because she is directly concerned in the steps that are being taken to develop cotton within British countries, interest is being manifested in the new possible cotton-areas, in Africa and elsewhere, that, sooner or later, will come into active competition with the United States.

The three great cotton-producers of the world — eliminating China, which consumes all that is locally grown — are the United States, with its long-staple varieties so essential for the mills of Lancashire; Egypt; and India, which grows mainly the shorter kinds that are not required for British consumption. It is generally conceded that there is a world-shortage of cotton and that this shortage will increase, rather than diminish, unless effective steps are taken to secure new fields of production. For

Great Britain and other industrial nations this shortage is a most serious problem which, while it has already tended to a great increase of prices, must eventually, if not overcome, bring about widespread unemployment in one of the greatest manufacturing processes carried on in the United Kingdom. How important this product is to England in general and to Lancashire in particular may be judged from the fact that it is computed that nearly one fifth of the entire working population is dependent, directly or indirectly, upon the cotton-trade for its living. It has been recognized, therefore, for some years, that the industrial salvation of this great community rests upon the finding and establishing of new sources of supply.

The position with regard to the United States as the main producer of the raw material is simple and can be stated briefly. During recent years production and average production per acre have decreased, while at the same time internal consumption of the raw product has advanced, so that the available surplus for export grows less and less. The remarkable advance in manufacture in the United States, and the diminution in the export of raw cotton that has already resulted from that fact alone, are serious problems that are confronting all consuming countries at the present day, and everyone is aware of the precarious position in which the cotton-manufacturing industries, not only of Great Britain, but also of the other industrial nations, may one day stand. While the acreage under cotton in the United States has increased from 33,128,703 for the years 1909-10-1911-12 to 33,657,038 for the years 1919-20-1921-22, the production has decreased from 2,972,132 tons¹ to 2,604,969 tons and the average

¹When tons are mentioned in this article, tons of 2000 pounds each are intended.

production per acre from 178 pounds to 156.2 pounds during the same period. In Egypt also acreage, production, and yield have been greatly reduced, the last from 382.2 pounds per acre to 299 pounds per acre. This alarming reduction in available sources of supply, if unchecked, will end sooner or later in disaster so far as Great Britain is concerned.

II

It will be of interest to examine what steps are being taken to remedy this shortage. When it first began to be realized that the time was approaching when the cotton supplies of the United States would be insufficient to meet the increasing demand upon them, efforts were made in Lancashire to establish new sources of supply. Early in 1901 attention was drawn to the dangerous position of the Lancashire cotton industry, owing to the fact that it was dependent upon the United States for the bulk of its supply and, therefore, was at the mercy of the vagaries of the weather in one particular part of the world. A failure of the American crop caused widespread distress, and effective steps were taken to establish an association which should encourage the growing of cotton within the British tropical colonies.

The late Sir Alfred Jones, one of the most active and farsighted of our industrial leaders, took steps on his own initiative to commence the growing of American cotton in West Africa; and in 1902 the British Cotton Growing Association — which has done a great work, the results of which are as yet hardly commensurate with the energy and money expended — was formed. With a subscribed capital of £470,000, drawn from both employers and employed, — an outstanding example of coöperative effort in Great Britain, — much work has been done to develop new sources

of supply in Africa, with, it must be admitted, varying success. As a first effort, cotton planters and experts from agricultural colleges in America were sent to West Africa, where cotton was cultivated in fairly large areas on the plantation principle. In certain colonies, such as Sierra Leone, the effort was unsuccessful; in the Gold Coast, cocoa almost entirely superseded cotton as a possible crop; while in Nigeria, a great tropical territory about one third the size of British India, with a population of nearly eighteen millions, the plantations that were developed proved unsuccessful, not because good cotton could not be grown, but because the African native does not take kindly to work as a hiring on large plantations, but prefers to own and cultivate his land. Subsequently the Association entered on the right track by encouraging the natives to grow their own crops, and the great function of the Association to-day, apart from many important but minor activities, is to act as a coöperative buyer so as to stabilize prices for the natives, so far as possible, and to guarantee a definite price for the year's crop. It also distributes improved seed and assists native production in various parts of Africa, notably Uganda, in the manner already indicated.

Early in its operations the Association established four great facts upon which the success of all efforts at cotton-growing in Africa must ultimately depend. Experience soon demonstrated — certainly in Nigeria, where land was acquired in proximity to some of the large towns and was in consequence more or less exhausted — that suitable soil was a prime factor; and there is now no doubt whatever that such soil exists in many parts of Africa. A sufficient rainfall was also found to be essential in areas where irrigation could not be successfully accomplished. But, given

these two prime factors, it was further demonstrated that there were two other great requirements — ample and cheap labor, and adequate transport. Enormous areas, probably suitable for cotton, are at present almost entirely useless owing to the totally inadequate local labor-supply. Although this does not apply to such countries as Nigeria as a whole and Uganda, it is a serious factor in territories like Kenya, Tanganyika, Nyasaland, and South Africa, where the available supply of labor is either small or employed in other more pressing directions. As we have noted above, the African worker, except perhaps in South Africa, does not take kindly to hiring work, or at any rate for prolonged periods such as cotton-growing requires. It is established, therefore, that in most districts it is essential that the native producer should become practically interested in the work, so that he and his family may give their individual attention to their own small cotton-plantations. Great cotton-estates are not likely to be established in those parts of the continent where the native has been accustomed to work more or less independently, and it has become evident that successful cultivation, such as occurs in Uganda, can be attained in Nigeria, for example, only if the native farmer is encouraged deliberately to work on his own behalf. This is now the general policy of the various Governments, the Cotton Growing Association, and other bodies.

The fourth factor of outstanding importance is transport. During recent years there has been a remarkable advance in the construction of railways in Africa; but these advances, great as they have been, have not kept pace with the increased production of the natives. Already the Uganda Railway, which brings the increasing Uganda crop from Lake Victoria to the coast, has proved insufficient for the demands

made upon it; and other railways are finding difficulty in coping with the enormous increase in productive output. Where railways do not exist, it is almost impossible, of course, to bring cotton to the coast, and largely for this reason considerable activity exists in the extension of railways in such countries as Kenya, Tanganyika, and Nyasaland, where the increase of cotton-growing depends on improved transport facilities.

The efforts of the British Cotton Growing Association in Africa and elsewhere, notably in Queensland, the garden state of Australia, laid the foundations of successful cotton-growing in the British tropical colonies. But the position that arose in the United Kingdom as a result of the war again focused attention upon the precarious state of the cotton supplies, and the Government became directly interested in the question. Steps were taken to put the effort upon a more satisfactory basis. While the Association was left to continue its work, a new body—the Empire Cotton Growing Corporation—was formed, with a more extended task than that of the parent Society. In 1915 the President of the Board of Trade, a cabinet minister corresponding to the Minister of Commerce in other countries, called into being an Empire Cotton Growing Committee to consider the situation in all its aspects. Their report, presented in October 1919, led to the establishment of the Empire Cotton Growing Corporation, formed under Royal Charter and representative of all the interests concerned in the cotton trade. This Corporation is in possession of an assured and established income, derived in part from a capital contribution of nearly one million pounds sterling made by the Government, luckily before the need for national economy had been demonstrated, and in part from the

proceeds of a new form of taxation imposed on a particular body of people for a specific purpose. This took the form of a levy of sixpence per standard bale on all cotton imported into and spun in the United Kingdom, enforced by an Act of Parliament passed in 1923.

This was a great advance upon the purely voluntary effort of the old Association. The work of the Corporation has in reality only recently commenced. Preliminary reports upon the possibilities of Tanganyika, Nyasaland, Nigeria, the Anglo-Egyptian Sudan, and India as sources of long-staple cotton have prepared the way for the extensive experimental work that will be undertaken by the Corporation, which is mainly concerned in extending by every possible means the cultivation of cotton within the Empire. Experimental stations are being established, students trained, experts distributed to the different colonies, and, in conjunction with the local Departments of Agriculture, much work is being done to increase the output of proved areas and to try the possibilities of other districts. So wide are the activities of the Corporation that they extend from the supply of ploughs for the natives of Uganda to the establishment of a Central Experiment Station in the West Indies, where all kinds of scientific investigations will be carried on.

Coincident with these activities in Great Britain was the creation of a similar body in India, where the India Central Cotton Committee was placed on a sound financial footing by a cess of four annas on each bale of raw cotton used or exported. The work of the Committee is similar to that of the Empire Corporation. It will advise the Government of India on all questions of cotton policy and will assist in the production of improved varieties,

especially those that will be suitable for the British markets. So far as India is concerned, attention need be directed only to the great irrigation schemes in Sind — the Sukkur Barrage over the River Indus, now being built at a cost of £12,300,000, which is estimated to irrigate an area of 5,300,000 acres, a region more than the total cultivable area of Upper and Lower Egypt and equally as capable of producing vast quantities of cotton.

III

The present position of cotton-growing in the British Empire may be summed up as follows. The greatest advances have been made in Uganda and the Anglo-Egyptian Sudan. Situated in the centre of tropical Africa, where the great through routes of the future will eventually converge, the Uganda Protectorate is one of the best examples of British methods of dealing with an intelligent native people, capable of infinite advance along the paths of civilization. The situation of Uganda with respect to the Great Lakes, especially Lake Victoria, the richness of the soil, and the comparatively ample population have rendered it an ideal country for cotton-growing, in spite of the fact that its distance from the sea has been a considerable drawback on account of the cost of haulage. The Uganda Railway from Mombasa on the coast traverses the highlands of the Kenya Colony and, at present, carries from the shores of Lake Victoria all the cotton produced in this region. Other railway-feeders are being constructed, but the chief hope of the future lies in the eventual canalization of the Nile, which would provide a direct and cheap mode of water-transport to the Mediterranean. The production of cotton in Uganda is entirely a native

industry, fostered, it is true, by the Government in coöperation with the Cotton Association and Cotton Corporation, but carried on by native growers, working on their own lands, aided by their families — an ideal condition, provided that the quality of the cotton can be maintained. Fortunately the natives are exceptionally intelligent and are quick to adopt the best methods of cultivation. Practically all the cotton is derived from two varieties of long-staple American Upland which were selected after experimental trials; and the annual compulsory burning of the old cotton-plants is a great factor in keeping the crop free from serious pests.

There has been a continuous increase in output since 1909-10, when the yield of ginned cotton was only 2769 tons against 15,000 tons in 1920-21, since which date there has been a further considerable advance. The possibilities of Uganda as a cotton country are immense and there can be little doubt that cultivation can be vastly extended.

In the Anglo-Egyptian Sudan farther north is another vast area in which large districts are capable of producing cotton. Here several great experiments are being tried, but throughout the whole country there is a lack of population and the conditions of production are different from those in Uganda. Owing to deficient rainfall most of the crop is dependent upon efficient irrigation, and for this purpose large irrigation schemes are under construction. In the Sudan the partners in the enterprise are three — the local government, cotton syndicates, and the native peasantry. The government supplies the land and water; the syndicates undertake the entire management, do the minor canalization, plough the land, and finance and market the crop; while the native does the actual work

of cultivation and gets forty per cent of the proceeds. Whether this elaborate scheme of tenant cultivators will appeal continuously to the African native is a matter of doubt, as unless the peasant becomes personally interested in his job there is always the danger of his returning eventually to his ordinary agricultural life. Great advances have been made, however, in the establishment of cotton areas. One of the chief of these districts is in the Gezira, a large plain situated between the two Niles immediately south of Khartoum, where an enormous dam is under construction near Sennar which, when completed, will enable 300,000 acres to be placed under cultivation, with a total of 2,000,000 acres should the full scheme be accomplished. Another extensive district is in the Kassala area, to which a railway is now being constructed, and a third region exists around Tokar on the Red Sea. There is, however, no real limit to cotton cultivation in the Sudan, except that imposed by want of labor and lack of irrigation, for in addition to the northern districts vast countries exist in the south which are at the present time entirely undeveloped. The annual output is about 5600 tons, produced from Sakellaridis, Assili, and American seeds.

In West Africa the great State of Nigeria is a peculiarly promising region, presenting enormous areas suitable for cotton and having intelligent native chiefs, a dense population, peaceable internal conditions, and seaports within a comparatively short distance of Europe. Although American cotton is being grown, the chief output is the indigenous variety, which has been cultivated for many centuries and is largely consumed in the country itself. There is no doubt, however, that there are great areas, especially in the neighborhood of Lake Chad, where good

cotton can be grown; but at present the principal difficulty is the absence of transport, and until the Lagos-Kano railway is extended in this direction there can be no hope of establishing cotton-fields at any distance from the main avenues of traffic. Similarly in Nyasaland the production of cotton is hampered by lack of adequate railway-transport, the great want being a bridge across the Zambesi and the extension of the present railway northward to Lake Nyasa.

In Tanganyika, on the other hand, the British administration is now benefiting from trials made by the Germans, who had established experimental stations and erected ginneries in many places. There are three enormous regions in this Territory capable of producing cotton—the coastal belt, where the rainfall is sufficient and failure of the crop is extremely unlikely, the Morogoro and Kilossa areas, and the Lake basin. In these districts production is extending, and 35,000 acres are computed to be under cultivation. It has been reported by Mr. Ormsby-Gore, Under-Secretary of State for the Colonies, that East Africa offers probably the finest field in the Empire for the further development of cotton, particularly in the Tanganyika Territory and Uganda; and there seems no reason to doubt this optimistic estimate. Farther south the great territory of Rhodesia offers opportunities for the cultivation of cotton along the valley of the Zambesi and its tributaries, and especially in North-eastern and Northwestern Rhodesia; while in the adjacent Union of South Africa, notably in Natal and Zululand, and in the native territory of Swaziland, advances are being made, although the output is retarded, owing to the lack of labor.

South Africa is one of those countries where the possibilities are great,

but the present position scarcely warrants the assumption that these possibilities will be carried into successful operation except on a comparatively small scale, largely because there are enormous demands for labor in other directions which seem to have the prior claim upon the attention of the authorities. In Zululand and Swaziland, however, there is an available supply of labor within easy reach, and for this reason railways are being built to the cotton areas.

It is unnecessary to say anything about cotton in the British West Indies, where, in any case, the output cannot be greatly extended; but in Australia there are vast areas, especially in Queensland, Western Australia, and the Northern Territory, where cotton can be grown. At present the output is almost entirely confined to Queensland. Here, however, the crop is produced by European labor, so that production is likely to increase only so long as the present high prices of cotton are maintained. As soon as the cotton shortage is adjusted and prices fall, it seems inevitable that the Queensland crop will have to give place to other products, unless there is a change in the national policy of employing only white labor. In any case the great difficulty of the future in all tropical countries, when

the experimental work of to-day has seen fruition and there is a vastly extended cultivation of cotton in Africa and elsewhere, will be to nurse the native through the years of falling prices that must inevitably occur. It is essential, if British cotton-growing is to be permanently successful, that the marketing of the crop shall be conducted under government supervision for many years, so that the native can be assured of the fruit of his labors and not discouraged by a continuous, and to him unaccountable, decline in the remuneration he receives. Under such supervision prices could be gradually adjusted to meet changing conditions, so that the native, upon whose coöperation the success of cotton-growing ultimately depends, would feel that he was not being cheated. Lancashire, in common with other cotton-trade districts, must look to the peasant proprietors or tenants of Africa for her salvation, and for this reason it is essential that the various Governments and the different associations already named should coöperate in maintaining the economic position of the native. This is one of the main factors of the situation, which is realized to the full by such bodies as the Empire Cotton Growing Corporation and the British Cotton Growing Association.

THE CONTRIBUTORS' CLUB

A HINT TO IMPECUNIOUS AUTHORS

BY ONE

LEST the above signature create in the minds of possible readers a doubt as to my qualifications for handling this delicate subject adequately, let me hasten to explain that it is not quite accurate—I am no longer impecunious, exactly. And it is in recognition of the fact that well-wishers of the human race have never been disposed to copyright their benefits, but have scattered them about to let those who would take freely, that I am moved to share the secret of my comparative solvency with the entire literary world.

So much by way of apology and introduction. Though, mind you, the discovery is as yet in what a scientist would call its experimental stage. But as I say, such as they are, you shall have the facts, gratis.

Surely all of us—I mean you and me and the host of other authors whose annual monetary profits run to five figures, all zeros—have at some time envied our more fortunate brothers, scoff at 'commercialism' and 'cheapened ideals' though we may. What one of us, imagining the monthly sales of So-and-So, the brilliant socialistic pleader, has not sighed over the dimensions of the same So-and-So's capitalistic bank-account? Or who of us, be he artist to his very fingertips, but has coveted Such-a-One's (the world-fêted satirist of Rotary Clubs) more than Rotarian income?

Briefly, then, my discovery is this: Though 'we may not climb the heav'nly steeps,' and though our hands may never wake 'to ecstasy the living lyre,'

still, with care and the exercise of prudent foresight in our choice of subject-matter, we can—provided only that our offerings are printed at all—live comfortably, satisfy all our legitimate wants, and (if editors be kind) even *lay by a competence for old age!*

Briefly, again, the light of inspiration—the dawn of this splendid discovery—burst upon me a year or so ago. Or perhaps 'burst' were too strong a word, since it came upon me slowly, gradually, like most other inevitable ideas. I had had a sketch called 'Barbershops' accepted for the Contributors' Club of the *Atl-nt-c M-nthl.* Turning the beautifully written check over in my hand—even their checks are beautifully written, though, alas, few enough of them I see!—I looked at it pensively, thinking to myself how many haircuts it would come to and thrilling at that tonsorial vista, all blessedly paid for. And then, still idly fingering the check, and as idly dreaming, I attempted to make out the interest if said check were put away as an investment—no easy feat, you will readily agree, when I tell you that I had left both pen and pencil in my other clothes.

And what was the right degree—or rate, I believe, is the banker's word—of interest? Liberty Bonds, Third Issue, I knew, bore $4\frac{1}{2}$ per cent. But my principal would buy but half a bond. Besides, $4\frac{1}{2}$ per cent was much too small an increase. Some perfectly reliable municipal and industrial bonds (See Back Advertising Section) brought 7 or even 8 per cent. But I was conservative—6 would be enough. Let's see: six times five is nought, carry

three; six times two equals twelve, add three — a year's interest would be \$1.50.

As I reflected thus idly, I realized that I could get half-a-dozen haircuts without encroaching upon my principal. I smiled contentedly to myself. And then I stopped smiling — and the Great Idea was born. Half-a-dozen haircuts would mean one every other month, leaving me a little long-haired, even for an author. But perhaps old Zeb — Zebediah Hopkins is our village barber — would come down to fifteen cents, if I'd shave my own neck. This would make ten haircuts a year, quite enough for a writer, especially allowing for the winter season, when it is inadvisable to be shorn too often with all this influenza going round.

Well, you grasp the notion. It is to utilize every ounce of efficiency in a manuscript, to make each accepted paper *pay for itself* — in other words, take off the poor author's back some specific financial burden. Last month, for example, I sold a rather longer sketch, a description of an old German shoemaker, for one hundred dollars, which, at 6 per cent, means one pair of six-dollar, or two pairs of three-dollar, shoes a year henceforth — forever!

As I say, the matter is in the experimental stage yet, and one never can tell about the future. But I am confidently laying my plans. Neckties, collars, socks, suspenders, — I consider belts unhealthful, — and underwear are next on my programme. My sketch of a Fifth Avenue necktie-salesman is, I am quite free to admit, somewhat troubling me; for we authors, if we wear cravats at all, must choose imported flowing ones, and they're expensive; but a 'sure-fire' comedy-skit I've in mind on a Third Avenue hatter should help me. I can borrow for my ties from him, you see, since I shan't need many hats with my fine head of

hair. Collars are simple: if anything should go wrong with my essay on them I can always wear a stock made out of an old bandanna, or, as a last resort, fall back on celluloid.

If it be objected to my theory that it is somewhat individualistic, that it considers only the author and takes no thought for his wife and children, I would reply that that is no valid objection. What is to prevent him from going in for domestic love-stories? They pay best of all, do they not? And if worst comes to worst, in this day of equal rights and opportunities a man's family ought to be able to compose sketches of their own. Nor is my theory incompatible with the production of the highest works of art: a man's ideals are no lower for an added incentive to defeat the rejection-slip! And if it be opposed further that the benefits accruing are too unspiritual, too sordid, too solely concerned with the material things of life, I would contend that that objection has no weight, either. No: the plan, let me repeat for the second time, is in its *experimental* stage only: merely the first of its myriad possibilities have been indicated. More will develop gradually, just as the bud unfolds into the full-blown rose, Rome, remember, was not built in a day: *primum herbam, deinde spicam, deinde plenum frumentum in spica*. Clothes, to be sure, do not make the man — but they make him look better and feel braver and more self-reliant. When we writers no longer have to worry about where our next pocket-handkerchief is coming from, editors perhaps will give us less to weep over!

Note. I trust that, in return for my generosity in sharing this remarkable discovery with the literary profession, no author will be unkind enough to take a mean advantage of my faith. I refer, of course, to the utilization for essay or fictional purposes of the little

red-haired Jewish tailor on 116th Street, New York, near Columbia University. Him alone I reserve for myself. Around him I've planned a serial from which I hope to obtain, not merely an annual pair of trousers, but an entire three-piece suit.

(The proceeds, if any, from the *present* paper will go toward establishing a permanent postage-stamp fund. Something tells me I shall need it.)

MY ANCESTORS

I HAVE just received the gift of an impressive parchment bearing in fine script a record of the long line of ancestors responsible, each in part, for my appearance on earth. The modern genealogical chart mercifully does not take the form of the biological ancestral tree from the lower branches of which apes unpleasantly leap. Instead it bears a striking resemblance to the Ptolemaic system of the universe, concentric circles and radiating lines, with one's self instead of the terrestrial orb occupying the strategic position at the centre. Round about me as a focus are ranged, tier upon tier, those lesser luminaries, my progenitors.

When I study the parchment and meditate upon that converging multitude of forbears, noble and peasant, proud and humble, living their little span of life and passing on, links in the chain whose obvious purpose was the filling of that central circle, I am at once modestly overcome and agreeably flattered. Only a carping critic could take exception to such a series: statesmen, governors, Quakers, Shakers, a few witches and a judge or two to condemn them, and a large amount of royal blood. What families those old kings must have had to supply every American who can afford to set up a family tree direct ancestors among the rulers of the earth! Even where royalty

is not definitely indicated, suspicion points that way. My chart confidently says, 'Line probably noble.' Of course. Why not? For the sake of the nobleness in other men, sleeping but never dead, I must cultivate my own.

I make rapid calculations. If my blood is so royal, am I not essentially royal myself? If I assume that I have four quarts of blood, my computations give me two teaspoonfuls of royal blood, three of noble, and the balance just blood. But if one drop of Negro blood makes a man a Negro, do not two teaspoonfuls of the regal essence entitle me to wear the purple? I feel satisfied in my own mind that they do, but when I think how difficult it would be to get the idea over to my barber or the elevator boy I feel as if I must confine the expression of my conviction to putting out the cat with the hauteur of a Plantagenet.

My ancestors must have married off their boys and girls uncommonly well. There is not a serf, a defaulter, or a garbage-collector in the entire tree. There were a few agriculturists among the number, but an explanatory item draws attention to the fact that they were primarily ministers of the gospel, and merely tilled the soil on the side.

I looked in vain for a suggestion of the gallows. Who would not be proud of a pirate or two among his ancestors, or a bandit, say of the period of Robin Hood? But my ancestors seem to have been of a uniformly moral and tractable type. It is hard to accept gratefully so docile a background. Think of the ignominy of inheriting a germ plasm containing not even a single gamete from a man radical enough to get jailed or deported or hung!

In that impeccable series of exemplary parents, devout churchmen, righteous citizens, there is nothing inspiring prior to my coming. Is there upon me an obligation to work out, in

my one incarnation, the law of compensation for all the tame lambs who were my predecessors? Must I pay the arrears of lost opportunity, of wasted initiative, of passive acquiescence, in one life of wild defiance? It would be a task of Sisyphus. Perhaps a Lenin could do it, but not a plain American who loves his home and obeys the traffic regulations.

My one comfort lies in the blanks that occur here and there in the penumbra of my chart. Nothing apparently could be learned about those obscure but necessary links. Does that simply mean nothing good? Has history drawn a smoke screen to hide them? Are they unhonored and unsung because of deeds of daring, so reckless as to incite others to dangerous emulation, or merely because of lives of utter inanity?

I like to think that those unrecorded ancestors expiated the virtues of the family line by deeds of darkness; that they wiped out generations of stodgy living by breathing the air of lawless adventure. Never to have been a law-breaker in certain periods of the history of the race is never to have had an idea, never to have displayed so much courage and imagination as a rabbit. I fill the blanks with ancestors of my own choosing: Eric the Ruthless; the Rebel of the Roanoke; Peter the Pirate of the North; and, possibly, the Sleuth of the Slums. My ancestresses I leave as they are. A female pirate's life would be hard and in the main unrewarding, so I will let the ladies sin vicariously through their sons.

My children look at the chart with lacklustre eyes. 'It's the bee's knees,' they observe, irrelevantly it seems to me, 'to have such a tediously Nordic bunch of ancestors. Thank Heaven we've got some real sports on Mother's side. Poor old Dad, that's where you lose out, having only half as many chances to be brilliant by way of heredity as we have.' The younger generation wins as usual; this time by being entitled to two charts where we have but one.

Professor Haldane of Cambridge predicts that it is within the realm of possibility that new members of our human society will be eventually produced by ectogenesis, and that in one hundred and fifty years from now perhaps less than thirty per cent of children will be born of women. What a bracing new trend it will give to genealogical study! We shall no longer be interested to carry our lines back to semisavage feudal lords, but shall claim to belong to test-tube series 124, pure Anglo-Saxon culture, or to the product of Laboratory WXZ, Alpine-Mediterranean cross, or shall ascribe our superiority to the experimental admixture of a dash of Semitic for ability, of Celtic for wit, with a Teutonic base for survival value. We may even assert a right to the good things of the earth on the basis of having been developed in the chosen solution. We shall have at any rate the solid satisfaction of finding our qualities no longer dependent upon chance, but scientifically predictable like those of our fellows, the Luther Burbank potato and raspberry.

THE CONTRIBUTORS' COLUMN

As every schoolboy knows, William Beebe has recently returned from hunting the denizens of the deep in the Sargasso Sea and the Humboldt Current. In a diving-suit Mr. Beebe made over seventy forays into Neptune's fields, and there found creatures as mysterious and fascinating as any that roam the jungle or Galapagos. Mr. Beebe is the only man who ever tickled a sea lion and saw him smile. ¶ Since 1894 Samuel McChord Crothers has been an *Atlantic* headliner and minister of the First Church (Unitarian) of Cambridge, Massachusetts. Lately Dr. Crothers has been rigging the intelligence market. His shares will go like hot cakes. ¶ The diary of Helen Dore Boylston, a Boston girl of the war generation, preserves the very spirit and feeling of those years which have made so lasting an impression on our veteran-children. Charles M. Sheldon, editor-in-chief of the *Christian Herald*, reminds us that the Bible is forbidden to far more schools than is Darwin. ¶ We quote in part a letter from Lucy Furman:—

As many of your readers already know, the background of my stories about 'the quare women' is a real one—the Settlement School at Hindman, in the mountains of Kentucky.

During the twenty-five years which have passed since the beginnings with which these stories deal, this school and settlement have grown steadily.

Twice there have been destructive fires. The first of these wiped out the beautiful log buildings which had been 'raised' with such pride and hope, leaving only a small five-room cottage. Although this fire occurred in the night, the quare women were able to save all the children, and a teacher down with typhoid, escaping themselves in nightgowns and with bare feet. The people of the village took them all in.

When the main buildings had been again destroyed by fire, some years later, the citizens did a remarkable thing. Feeling that the houses should not be crowded together as they had been on the three-acre plot originally donated, the men of the village and county, out of their poverty, raised the surprising amount of six thousand dollars to buy the mountain-side on the

opposite bank of Troublesome Creek, where many of the buildings now stand. It is things like this—the privilege of helping those who are forward to help themselves—that so endear the work to the quare women. The parents of the resident children pay a small tuition fee for each, while the children help themselves by their labor, each working twenty-eight hours a week for his or her board. The past year has been a very hard one for all charitable enterprises, and Hindman has been no exception. Help is needed in various directions. A scholarship of \$150 a year must be raised for each resident child. At present there are more than six hundred on the waiting-list. Five hundred dollars is needed at once to complete the salary of the Public Health Nurse, part of which is paid by the people themselves. One thousand dollars is desired toward the salary of a school principal. Money to build new cottages to house the children is another need. But the most crying of all is an endowment fund, so that the crushing burden of raising so much money yearly may be lifted from the shoulders of Miss Stone (the 'Amy' of the stories), who for twenty-five years has given her life and strength to the work.

Gifts may be sent to Miss May Stone, Hindman, Knott County, Kentucky.

* * *

I. A. Richards is a Fellow of Magdalene College, Cambridge, and the author of *The Principles of Literary Criticism*. ¶ The primitive and natural melodies of Virginia Moore are rooted in the earth of the Mississippi plantation where Miss Moore and her family have lived for generations. ¶ The record of Benjamin Harrison Chaffee is true, every word of it. Now studying for his Doctor's degree, Mr. Chaffee intends to return to the North Carolina village of his narrative, there to apply his new doctrines. ¶ More than imagination has gone into the making of A. Cecil Edwards's stories. Thirteen years' residence was sufficient to familiarize Mr. Edwards with the suavity, charm, and certain other qualities of Persian gentlemen. ¶ An occasional contributor, Clifford H. Farr has lately been appointed Associate Professor of Botany in Washington University.

A Croix-de-Guerre man, **Robert Alden Reaser** is a young artist who admirably contrives to butter and sugar his bread without disloyalty to his austere Mistress. ¶ Author and educator, **Abraham Flexner** has been secretary of the General Education Board since 1917. ¶ Bulls and bears, not to mention the shorn lambs of Wall Street, will do well to listen to the admonition of **Edgar Lawrence Smith**.

* * *

Eastern expert and late Professor of Byzantine and Modern Greek Language at London University, **Arnold J. Toynbee** has recently composed a Survey of 1924 for the British Committee of International Affairs. During the war Mr. Toynbee served in the Political Intelligence Department and was a member of the British Delegation to the Peace Conference. **Evans Lewin** describes the present and contemplated struggle for cotton which is now concerning long-headed business men on four continents.

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'Buying it' — a corollary.

PHILADELPHIA, PA.

DEAR ATLANTIC, —

I have just read the article called 'Selling It' in the July *Atlantic*, signed by a social worker who is not a propagandist.

I am also a social worker directing work in three of the worst sections in the same city. However, I am a propagandist, — it's a good word, though suffering a temporary disrepute, — and I have most definite opinions relative to the new and thriving industry of bootlegging, of which your contributor gives so true and so vivid a picture. It is true that I have a little different slant on the picture, but it should only serve to corroborate her evidence.

My neighborhood is made up largely of those who are 'buying it.' Those who are 'selling it' do not consider me a friend. An appeal made to me to intercede for a mother of three small children who had been selling it in her candy store was refused as forcibly and expressively as my vocabulary permitted. I have appeared repeatedly before local magistrates as complainant, and before the Grand Jury. Cases of illegal selling which come to my attention are reported, my theory being that every citizen has a duty to help enforce the law. It's too big a task for one man and a police force. Besides, as I said in the beginning, I am a propagandist. I see too many little children whose fathers have been

buying it. In the section where I live, in one year, two families of small children were left homeless, with a murdered mother and a prison-sentenced father, as the result of a debauch on poisonous hooch. The doorbell rings too often at the appeal of a woman asking protection, or a child shut out on the streets at night by a drink-crazed parent. I stumble over too many sodden wrecks on my doorstep and evade their staggering progress on the street. And always there burns in me an indignation against the person who has exploited their weakness for money.

In three months' travel this spring, which gave me opportunities to talk with men and women of the north, south, and west, including that outpost of the Pacific, Hawaii, I heard just one favorable word for the principle of Prohibition, and that defense came from the wife of a widely known manufacturer, whose opinion she reflected.

I came to see that large numbers of people, perhaps a majority, are sincere in believing that their personal liberty has been unwarrantably interfered with in so flagrant a way that they are justified in outwitting the law.

But employers of labor, educators, physicians, social workers, — we who know the unhappiness and deprivation of the innocent and the even more pitiable wastage of once promising youth, — we surely must each radiate from the centre of his little sphere, not only a spirit of protest against criminally lax government control, but a positive attitude of sharing responsibility for law enforcement.

Furthermore, the issue will have to be faced: Is enforcement of the present law possible? If not, agitation and education for a modified law that can be enforced even though we count as antagonists both the Volsteadian and the bootlegger.

PHOEBE HALL VALENTINE

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Engineers, and lovers of Franklin in particular, have been disturbed by Alexander McAdie's query, 'Where and when did Old Ben fly his kite?'

DEAR ATLANTIC, —

Let me thank Mr. McAdie, through you, for his diverting article on 'Franklin and Lightning.' I read it to my wife last night during a thunder shower, appropriately enough. I must say, however, that I was stunned, as by an electrical shock, when I read the passage in which your breezy contributor expresses uncertainty as to the historicity of the famous kite experiment. I could not forbear placing an exclamation mark in the margin, and this morning I have been re-reading the *Autobiography*, a human document,

which; as a loyal Philadelphia boy, I have long cherished.

Now what does 'rare old Ben' say? Speaking about the interest of the French in his experiments, especially about one 'for drawing lightning from the clouds,' Franklin then says: 'I will not swell this narrative with an account of that capital experiment, nor of the infinite pleasure I receiv'd in the success of a similar one I made soon after with a kite in Philadelphia.' Now is n't this definite enough? Mr. McAdie expresses the hope 'that some corroborative evidence by someone who saw these flights may yet be found in old journals and diaries.' I certainly share in that hope, but I can't for the life of me see why he should refuse to accept the plain affirmation of honest 'old Ben.' True, the evidence is scanty. But, 't will serve.'

I rise, Mr. Editor, to Poor Richard's defense. I am not a scientist, nor the son of such. I am only a simple-minded lover of books and of men, and a neophyte in the handling of both. We are dealing here with historical fact. 'Rare old Ben' was the incarnation of level-headed common-sense. I would no more accuse him of self-deception than I would my saintly grandmother.

Please let's have further light! Mr. McAdie, I'm not convinced.

Gratefully,

CHARLES E. DUNN

Mr. McAdie defends his position.

DEAR DOCTOR DUNN, —

The Editor of the *Atlantic* has kindly sent me your letter of June 30 and I am glad to try to answer the inquiry regarding the famous kite experiment of Franklin.

You are quite right in quoting the *Autobiography* and regarding it as a human document. It is a classic; and of course I am familiar with it. Ben does say 'that capital experiment' and 'the success of a similar one soon after with a kite at Philadelphia.' So far you win. But the *Autobiography* was not based on notes. It was not begun until 1771, Franklin being then sixty-six years old; and, as I understand it, was only brought down to the time when he was twenty-four years old (1730). About 1783 or 1784, Franklin resumed the writing of the *Autobiography*. He was then about seventy-seven and memory at that age is sometimes uncertain. An account of the experiment given by Stüber — he says that he talked with Franklin — is the account generally accepted, and it is so full of contradictions that it is plain that either Stüber or Franklin put color in the brush. Franklin, you will remember, was not strong on saying his prayers. And he sometimes said things that he

knew were not so. Also, in setting forth the requisites for success, he placed thrift first and honesty eighth on the list.

But all this has not influenced us. We have tried to ascertain the date of the kite experiment. Surely if it was a capital experiment he would have put down the date.

I have had the help of the best authorities on Frankliniana in this country (Philadelphia authorities included) and we are all unable to find a date for the kite experiment.

Sincerely,

ALEXANDER MCADIE

P. S. — You say that Ben was the incarnation of level-headed common-sense. I tried to fly kites in thunderstorms; and the remarks made by relatives and friends were not complimentary.

Let there be light.

RANDOLPH, NEW HAMPSHIRE

DEAR ATLANTIC, —

In the flood of current publications pro and con evolution, this drop in the *Atlantic* — 'The Bee's Knees' — is worthy of passing comment. For it concludes so inconsistently, '*Science . . . solves nothing*,' after its gifted author, through simple scientific observation, has so interestingly solved how the bee cleans its antennae, how it conveys its food hiveward, how it empties its pockets, and so forth, and so forth. At last the keen observer confesses himself 'completely frustrated' by the question 'whether the bee's antenna existed first and needed a cleaner . . . or whether the cleaner happened first and needed something to clean.' It is then, after repeating some of the earliest criticisms of Darwinism, that he declares that evolution 'has become a sort of theology' and 'has got itself mixed up in our educational programme.' Not so fast, Mr. Layman! Evolution is in our educational system because it points the way to solving just such problems. If antennae exist in insects generally and these cleaners do not, it suggests *a priori* that the antennae were there first. That the front legs were used in cleaning them — that a special spine came to play a perfect part in the cleansing process — does not seem particularly mysterious. What are the arrangements in other insects? In other words, what is the comparative anatomy of the structure? If one is not interested to push the inquiry, should he 'drop the subject' in the *Atlantic*, and spell mystery with a capital?

'Scientists are simple folk,' as Osterhout observed. They have enough to wonder at, but the wonder more and more becomes directed toward objects worthy of it. And science solves much, for as Carlyle remarks, — and here is the

theology of it, — 'All light and science, under all shapes, in all degrees of perfection, is of God; all darkness, nescience, is of the Enemy of God.' Is it not Carlyle's teaching, rather than Stewart's, which needs publication just at present?

Sincerely yours,

FREDERIC T. LEWIS

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The East and West of it.

DEAR ATLANTIC, —

The direct-primary law works better in California than in Pennsylvania, judging from the article of Imogen B. Oakley in the June *Atlantic*.

Its success in California may be attributed, I think, to three factors in our political life:

First: The Legislature, soon after the enactment of the present primary law some twelve years ago, adopted a statute abolishing partisan designations after the names of candidates for city, county, and township offices. The advantage gained by appending partisan designations to the names of candidates for these offices on the ballot was largely responsible for the efficient political machine maintained in this state before the primary law took effect.

Second: The abolition of the legalized saloon and the almost complete eradication of saloons, legal and illicit, in this state, have deprived the machine of the gathering-places where, previous to the enactment of the Volstead Law, the deliverable vote usually collected previous to election for the purpose of being directed how to vote. I have known a single saloon where, between Saturday morning and Monday night preceding Tuesday's elections, three hundred ballots were marked for voters who were willing to follow the leadership of the boss and his henchmen.

Third: The appointment of women election officers has greatly reduced election frauds. County boards of supervisors and city councils have found that women serve as well as do men on these boards, and the unwillingness of men to serve for the fees paid has caused women to absorb almost completely the duties of election officers.

Elections in California may be said at present to be clean, and in reply to a questionnaire submitted by the Commonwealth Club of California, a civic organization composed of all classes of professional and business men, the vote was almost two to one in favor of its retention.

In California, however, a determined and insidious attack, instituted at the time the primary law was passed and constantly pressed ever since, is encouraged by such articles as that of our Pennsylvania friend. The ills which have been corrected by the primary law in California will be in time forgotten by a generation who will not

have known them, and no doubt California will be compelled in the near future again to pass upon the question whether its primary law is good or bad. When that time comes I hope the *Atlantic* will not be quoted against the law.

WILLIAM A. BEASLY

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How fast can you stop?

PAUL SMITHS, N. Y.

DEAR ATLANTIC, —

I have just finished Herbert L. Towle's article, 'The Motor Menace,' in your July issue. It is very good and most interesting, but why do all such articles deal so much with 'penalties,' 'insurance,' and 'psychology' and so little with mechanics?

I have owned and operated cars since 1905, and have always contended that half the cars on the road have brakes so worn or poorly adjusted that they won't stop at twenty miles an hour as quickly as the car with properly adjusted brakes will stop at forty miles an hour. Steering gears too are often so faulty in adjustment that they are slow to act.

I believe that, if the cities and states withdrew half their motorcycle policemen and put them in plain clothes with the power to stop any man anywhere, any time, and make him demonstrate his brakes and steering gear, the net result in a practical way would be far greater than all Mr. Towle's suggestions put together.

Incidentally this need not be a hit-or-miss inspection, for the Bureau of Standards has an instrument that instantly shows the rate of deceleration when brakes are applied.

GEORGE H. TOWNSEND

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That maternal instinct!

DANVILLE, KENTUCKY

DEAR ATLANTIC, —

Here is a tale of Kentucky which might have come from the pen of Lucy Furman in her chronicles of the Southern mountaineer. However, there are 'Quare Women' even in the small towns of the Bluegrass.

The public health nurse was holding one of the monthly clinics, and among those whom she had cajoled or otherwise induced to come was a weary-looking, bedraggled woman with three small children tugging at her skirts.

An unsuccessful attempt was made by the nurse to obtain the 'histories' which the doctors required for their examination, but the mother's answers were altogether vague.

At the conclusion of his tests, the physician turned to the woman and explained: 'Your youngest child has diseased tonsils and a bad

case of adenoids. We will have to take them out as soon as you can make the necessary arrangements.'

Suddenly the woman was interested! 'No, sir!' she exclaimed. 'I aims ter bury 'em with all their parts!'

EMMA HARPER APPLEGATE

The little glory that attends publication is too often bestowed on the editors instead of being divided equally between them and the business staff. This letter is a gracious monument to our publisher, who has been responsible for the physical character of the *Atlantic* for over a quarter of a century.

GREEN LAKE, WISCONSIN

DEAR ATLANTIC, —

The Contributors' Column, very appropriately, has many good things to say about the contents of the *Atlantic*, but to my mind far too little is said about its delightfully satisfactory binding. It is perhaps of first importance to have something worth binding, but, like a good tea made vastly pleasanter for perfect china and linen, the *Atlantic* authors are given an advantage of fine binding and general make-up which I hope they are humble enough to appreciate. The *Atlantic* may be read in bed, or on a mountain top; it may travel for days in a pocket, be turned inside out a hundred times, and yet be sound enough to join the goodly company of its predecessors on library or attic shelves.

When the *Atlantic* passes through a family and among its friends, and is handed down to one, two, or three generations intact, one wonders what upholds, among those workers in the background, the spirit which maintains such a degree of perfection. If it is a tradition, a family secret, let us hope it may be nurtured as one of the *Atlantic's* treasured possessions, for its value would be difficult to estimate.

'Blest be the tie that binds!' Not only the efficient tie that binds the pages of the *Atlantic*, but the mysterious thread of friendship that seems to join the magazine to its readers. It is natural to go to the *Atlantic* for an explanation of this feeling of freemasonry, and perhaps a recent good phrase, 'reverence for perfection,' contains the secret. 'Reverence for perfection' on the part of editors and publishers, and real reverence from readers for the high standard maintained.

Many years ago, as a child, I pieced out *Elsie Venner* and *The Guardian Angel* from a shelf of old *Atlantics* in my grandfather's bookcase, and nosed about among fascinating Civil War articles with a delight which is still vivid. I decided then that no *Atlantic* ought ever to be thrown away. I have never seen an *Atlantic* on an ash-heap, and hope I may be forever spared this sacrilege!

Sincerely,

HARRIET L. KUTCHIN

The editor has enough responsibilities of his own. This conundrum is respectfully referred to our readers.

DEAR ATLANTIC, —

Here's a little story for you. It is true.

Some time ago, not without malice aforethought, I wrote a poem. Now I have written some hundred odd poems in the course of the past few years; but this particular poem was different from the others. It consisted of twelve rows of words, idle words, strung on their grammatical wires correctly enough, but purposely conveying no meaning whatever. Not a sign of a thought back of them — simply high-sounding phrases, put together so that they looked like a perfectly good poem of the modern imagist school. (I took care that the verses should contain plenty of imagery, to cover up the total lack of thought content.)

This 'poem,' with no comment and with some misgiving, for I will admit it was not exactly the sporting thing to do, I sent with other bona fide poems to a man I should not dare say how high in the world of literary criticism — oh, terribly high! Well, the great man swallowed the bait, hook, line, and all, saying a word in commendation of the group of poems, but singling out the fake poem for honorable mention!

The above incident raises a horrible question in my mind — a question which has been skulking in my mental back porch for some time. Is it possible that some of the modern poetry — you know the variety I mean, all mauve soul-throbbings and green whispers and passionate stardust — is concocted during a mental lapse on the part of the writer; or does the 'poet' intentionally pile colorful words upon colorful words, the whole fabric interwoven with no more meaning than was my own gem; or what have you?

COLIN DALE

